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P A T H E T I S M .



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P A T H E T I S M ;

WITH

PRACTICAL INSTRUCTIONS.

Demonstrating the Falsity of the hitherto prevalent assumptions in regard to what has been called

“MESMERISM” AND “NEUROLOGY,”

And illustrating those Laws which induce

SOMNAMBULISM, SECOND SIGHT, SLEEP, DREAMING,
TRANCE, AND CLAIRVOYANCE,

With numerous Facts tending to show the Pathology of

MONOMANIA, INSANITY, WITCHCRAFT,

AND VARIOUS OTHER

MENTAL OR NERVOUS PHENOMENA.

BY LA ROY SUNDERLAND.

“There cannot be a sounder maxim of reasoning, than that which points out to us the error of attributing the phenomena that occur to remote and extraordinary causes, when they may, with equal propriety, be referred to causes which obviously exist, and the results of which we daily observe.”

NEW-YORK:

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Bul
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P R E F A C E .

It is now generally admitted, that some knowledge of Pathetism prevailed in Egypt, more than three thousand years ago. The celebrated Anthony Pluche, in his account of the Ancient Egyptians, copies from Montfaucon a complex figure, which has been understood to represent the Egyptian process of pathetising. A patient is stretched upon a couch, while a large Anubis is painted in the act of making the passes over him, with one hand raised above his head, and the other placed upon his breast.*

It is said, that the priests of Chaldea practised pathetism as a medicinal agent, many years before the Christian era. Celsus, a philosopher of the first century after Christ, speaks of a physician, who soothed the ravings of the insane by manipulations; and he adds, that his manual operations, when continued for some time, produced a degree of sleep or lethargy.

Various authors, from the earliest ages, have referred to cases of disease which have been cured by similar means; and almost every sect of enthusiasts has had its records of cures performed, not, indeed, by miracle, but in some instances, it may have been, by the touch or friction of the human hand; as it is well known that similar means were recommended for

* *Dict. des Sc. Med.* This picture is copied into "Fellow's Exposition of the Mysteries of the Ancient Egyptians," p. 304.

the cure of certain diseases, long before the days of Mesmer.

In no other country where this agency has become known, has its therapeutic benefits been so little sought after, or so poorly appreciated, as in our own. This may be accounted for, in part, by the manner in which this subject has been exhibited, from time to time, in different places. Where people have to depend upon public exhibitions, and know nothing more of its use than what they see in experiments made for mercenary purposes, we are not to expect them to place a very high estimate upon any of its alleged practical benefits.

It is believed, however, that a large number of the most intelligent of the learned professions in this country, are convinced of the truth of pathetism; and not a few of these classes have seen and tested the valuable benefits to be anticipated from its use, in the cure of disease.

Did the limits of this work permit, we should gratify our readers with some accounts of the present state of pathetism in France, Russia, Germany, and Prussia, countries where its practice has long been patronised by the learned, and especially by the medical profession. The government of Prussia, in 1817, attempted to guard its practice by legislative enactments, prohibiting any but regularly organised physicians from its use, and requiring them, when they did so, to report their proceedings, quarterly, to the authorities of the state. A society of Paris, from 1814 to 1820, published two periodicals, devoted entirely to the narration of facts, and the diffusion of intelligence connected with this subject. In Prussia and some

other countries, hospitals have been established for the sole purpose of treating the sick by the use of pathetism. And a decree of the Medical College of Denmark, passed in 1815, and another in 1817, imposed upon physicians the duty of reporting the results of their pathetetic practice. But we have not the space necessary for any considerable proportion of the testimony which might be quoted, showing the estimate placed upon it by the learned in other countries, as a medicinal agent. And to deny it, as observed by Dr. Marc, before the Paris Academy of Medicine, (in 1825,) "to deny it, would be to suppose that men of the greatest merit, two learned bodies of the first respectability, and governments known to have surrounded themselves with the best physicians, must have, in various places, and at various periods of time, fallen dupes of miserable jugglers, and propagated, favored, and executed, labors merely chimerical.*

In our own country, nothing, probably, has done more to bring this subject into disrepute, than the manner in which it has been treated by its professed friends. Public attention was first called to it under a most disagreeable name, and the many silly stories put in circulation about its wonders, could but arouse prejudice, and unfit the mind to give it a candid examination.

Though it will be seen that the author of the present volume claims originality for the *theory* advocated in the following pages, as well as some of the processes of operating, yet it must be borne in mind, that no *new* agency is assumed, by whatever names this influence may have been known in previous ages of the world.

* Progress of Animal Magnetism. By Dr. C. Poyen, Boston, 1837, pp. 19—22.

The author's numerous cerebral experiments, have been conducted with the special design of ascertaining more than seemed to have been known heretofore of the *functions of animal life*. And the following pages contain the results of investigations connected with nervous difficulties, which have been continued for a number of years. Upon mature consideration, it was believed preferable that the results of the author's observations should be given, rather than the details of numerous experiments ; as volumes might easily be filled with the latter, without affording any real benefit to those for whom this work is designed. His opportunities for observing those classes of mental phenomena, supposed to be of the utmost importance in forming right conclusions as to the laws of mind, have been ample ; and the experiments in Phrenopathy having now been repeated by a large number of operators, on both sides of the Atlantic, no room seems left to doubt as to what some of those laws must be which govern the vital, organic, and mental functions of the human system.

It is easy to conceive how great the disappointment of many will be, on finding that the author, after devoting so long a time to the investigation of this subject, should reject the hitherto prevalent assumptions in relation to what has been called the magnetic or nervous *fluid*. But that these assumptions have not been rejected without some good reasons, the following pages will show. Nor can the author entertain any doubt, that if previous writers had taken up the subject as he has done, they would have arrived at similar results. Instead of attempting to *test* these assumptions, it has been every where taken for granted

that a *fluid* was eliminated from the operator, into the system of the patient; and the various phenomena have been explained accordingly. Indeed, the author of what has been called "Neurology," has frankly told us, that he formed his theory first, and then commenced his experiments in proof of it! And in the same way the notion has so generally obtained, that the agency treated of in this work was really a magnetic or nervous *fluid*; and one generation has believed it after another, because the necessary pains have never been taken to arrive at the truth on this subject.

New-York, March 1, 1843.

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The reader is requested to make the following corrections :

Page 5, 4th line from the bottom, for "be composed," read "*is* composed."

Page 35, 9th line from the top, "*which*" should be stricken out.

Page 36, 2d line from the bottom, for "pathist" read "*pathetist*."

Page 42, 9th and 15th lines from the bottom, for "*inflex*," read "*reflex*."

Page 44, 12th line from the top, for "fact" read "*facts*;" and 5th line from the bottom, for "sympathy" read "*somniopathy*."

Page 81, 2d line from the top, for "it," read "*them*."

Page 108, 14th line from the bottom, for "thus," read "*this*."

Page 109, 13th line from the bottom, for "magnetic," read "*magnet*."

Page 118, 2d line from the bottom, for "these" read "*there*."

Page 128, 3d line from the top, for "Phrenis" read "*Phren*."

Page 133, 20th line from the top, for "venesection," read "*vissection*."

P A T H E T I S M .

CHAPTER I.

EXPLANATION OF TERMS.

Most persons, at all familiar with the subjects we propose to investigate, have felt the want of suitable terms, by which to designate them; and some terms we have been in the habit of using, have not been understood by all, and others, have been used in a sense widely different from what their radical meaning would justify.—Somnambulism, from *somnus* and *ambulo*, properly signifies walking in a state of sleep; but it is often incorrectly used to signify a state of sleep, merely, and without any reference to its peculiar nature, or the manner in which it may have been induced. But, as there is manifestly a marked distinction between natural sleep, and that which is artificially produced, we want some term suitable for designating the state of *induced* sleep, to distinguish it from any other. And so of the *process* for producing sleep. The term “Magnetising,” has been used for this purpose, to some considerable extent, but all have been agreed that this was not, by any means, so appropriate as could be desired. The truth is, many of the phenomena common to a state of induced sleep, are so new and unaccountable, that language does not seem to have afforded the necessary terms for designating them all; and though we offer the following, we must confess that these do not, by any means, cover the entire field, nor, indeed, are some of them quite so “classical” as we could de-

sire ; yet they will, we are persuaded, answer a good purpose till better terms can be found. It is well known that our term *sympathy* is from two Greek words which signify fellow-feeling, or a like feeling with another, as *sumpascho*, was used among the Greeks in this sense. And hence the use which has since been made, in medical theories of the term *pathos*, which signifies not only disease, but *passion, feeling, excitement, emotion* ; and *pathetikos, susceptible of emotion*, that which *produces emotion or feeling*. And, that, what has already been understood, among physicians by the term *sympathy* and antipathy, has its *foundation* in that quality, or *nature* of living bodies which is the *ground-work*, if we may so speak, of all that has ever really been produced under the name of Mesmerism, there can be no doubt at all. I do not say that the phenomena of the induced sleep for instance, is produced by nothing more nor less, than what has been known of the laws of *sympathy*, but, what I mean is, that all that has been understood of physical or mental *sympathy*, has originated, or been founded in that same *susceptibility*, upon which we operate in producing any mental or physical effects upon the system of another by manipulation. No term, therefore, so well expresses what is really meant when speaking of the *agency* by which one person operates on the mental or physical organs, of another, and for the production of all those phenomena peculiar to the induced sleep, as one which gives the idea of *sympathy*, and a state of *susceptibility*, which renders this influence efficient and successful in producing the desired results in any part of the system on which the operation is performed. Every physician knows that disease is often communicated by *sympathy* ; and it will appear on examination, I think, that this same *agency* may be equally efficient in its cure. But the results brought about in this way amount to nothing more or less, than what has so long been known under the term “animal magnetism.” Hence my authority for the adoption of the following terms ; and I may add, that they have not, heretofore, been *appropriated* to any other use, and hence there is, there can be, no reasonable objection to their application in the sense here proposed.

Pathetism.—I use this term to signify, not only the AGENCY by which one person by manipulation, is enabled to produce *emotion, feeling, passion*, or any physical or mental effects, in the system of another, but also that SUSCEPTIBILITY of *emotion or feeling*, of any kind, from manipulation, in the subject operated upon, by the use of which these effects are produced; as also the *laws* by which this agency is governed. I mean it as a substitute for the terms heretofore in use, in connection with this subject, and I respectfully submit it to all concerned, whether this be not a far better term for the *thing signified*, than either Magnetism or Mesmerism. The former of these has, for centuries, been appropriated, and which, when used, expresses more than is necessarily included in its meaning, when applied to the human body. The term Galvanism would be far more appropriate, than that of Mesmerism, but, I think it best to use one which answers my purpose, much better, and to which there can be no serious objections.

Pathetise.—The act of manipulating the human body, for the purpose of inducing sleep, the relief of pain or the cure of disease. The act of applying the fingers to different parts of the head, or the body, for the purpose of exciting, or controlling the mental organs.

Somnium.—This term was first used, I believe, by Dr. Mitchell, of New York, to designate what has been called by some *sleep-waking*, that is, a state in which persons, in a peculiar sleep, perform acts of which they are, at the time or afterwards, wholly unconscious. The term is needed to designate the state of spontaneous sleep, merely in distinction, from that state which is accompanied with walking, and also from the other states described below.

Somnist.—One who spontaneously falls into a state of somnium, or sleep-waking.

Somnipathy.—The induced sleep, brought on by the process of pathetising.

Somnipathist.—One in a state of sleep, induced by pathetism.

Somniloquist.—One who is made to talk, in a state of somnipathy,

Phrenopathy.—The developement of the mental functions by pathetism. The theory which teaches the *susceptibilities* and *influences* of the human brain; the method of controlling the different cerebral organs, and the results produced on the *mind*, by manipulating different parts of the *body*. Upon the discovery of the susceptibility of the separate cerebral organs, to the control of pathetism, for the want of a better term, these experiments were reported under the terms, “Phreno-Magnetism,” “Cerebration,” &c. But as, from the first, I have controlled the mental organs, not merely by applications directly over them, but also by manipulating different portions of the face, neck, limbs, trunk, and indeed the teeth, fingers and toes of the human system, I think the above term more appropriate. Whatever impression, therefore, is made upon the *mind*, by applying this agency to any part of the body comes within the sense, in which it is used in this work.

Clairvoyance.—Simply clear-sight; but it has come into use to signify, sight without the eye.

Second-sight.—This term as is well known, is used to signify a sight of distant objects; or what would be called a supernatural perception of persons, or things at a distance. The terms, *supersentient*, and *somniscience* are used, also, in the same sense.

CHAPTER II.

HUMAN LIFE.

As our enquiries relate to the nature of living bodies, it is plain, that what we want to know, is most directly concerned with human life, and the laws by which it affects and controls matter. When it is said, that we never can know anything with regard to the essential nature of life, it is affirming no more than we are forced to admit of matter itself. For, who has ever been able to tell what matter is? Some of the laws by which it is governed we know, but who has been able to demonstrate whether matter be composed of one or more elements? Nor are our enquiries with regard to life, really, any more difficult; for over the essential nature of both life and matter, there hangs the same impenetrable shade of mystery, and whether we shall ever be able to advance beyond the knowledge of our predecessors or not, on these questions, remains to be seen.

If we merely use the term *life*, as expressive of a fact, like the term *attraction* or *repulsion*, it may be as easily defined as any known property of matter. The following are some of the reasons which incline me to the opinion, that *life* is not the result of organization, but that it is, itself, a distinct *element*, and governed by laws of its own.

1. ITS POWER OVER THE LAWS OF MATTER.

The fluids of which the embryo is formed must be endowed with life, because, from their union, or by one, when in contact, or sufficiently influenced by the other, it is certain, a living substance, or being is produced, which partakes of the qualities of its parents. If it be assumed that this fluid be composed of particles, in an organized form, we might answer, that life gave them this form, and hence they must be the results and not the cause of life.

From the scripture account it is plain, that the formation of the human body preceded the gift of life. After man was formed from the dust of the earth, we are told, (*Gen. 2: 7,*) God “breathed into his nostrils the breath of *lives*, and man became a living soul.” And some have supposed that the language of Moses, (*Lev. 17: 11*), is to be understood as affirming that the blood is *alive*, and that life is deposited in this fluid. But, the meaning is simply, that the life depends upon the blood, so that when it is withdrawn, life ceases. If this be not his meaning, it would involve the absurd notion, that the blood is the only part of the system which is alive, but this we know is not the fact.

We admit, that without the constant operations of the well-known chemical affinities, life could not exist for a moment; but these affinities are *controlled* by life, and hence decomposition cannot take place; and the system is thus preserved from death and decay. And in a word, we may say that almost every function of living bodies is performed in *opposition* to the all-pervading law of gravitation. The fluids ascend against this law; and so of the sap in vegetables, it is forced up by the principle of vitality, which controls matter, and which, therefore, cannot be a mere result of its organization. For, to suppose that this phenomenon, is the result merely of organization, would be to assume that matter has a self-determining, self-controlling power. But it is an acknowledged law of matter, that by itself, it is absolutely *inert*, and any power it may manifest, must be derived; so that whatever changes may be observed in its different states, they are produced by some extrinsic cause; hence the conclusion seems reasonable that life is an element, distinct from matter, as much so as light or caloric.

This power of animal life may be seen also in its *identity* and *perpetuity*, if we may so speak. It remains the same in whatever clime, or color, or state, it appears. Since the world existed, no change has been produced in this element. It is the same in the human body—it is the same in the various forms of beasts, birds and reptiles. True, some of the particular features of the bodies which it animates, may

change, but this principle remains the same, and from the first, it has possessed the power of perpetuating itself, unchanged, from generation to generation and from age to age. But if life be nothing more than the result of organization, or mere electricity, it could not be shown how the life of one animal could be preserved distinct from another; or how man could preserve his identity, or why the animals, birds and insects do not so mix up their existences as to become lost in one general amalgamation.

2. LIFE POSSESSES THE POWER OF CONTROLLING THE IMPONDERABLE FLUIDS.

We say life, because we know, that the same bodies when deprived of life, are immediately operated on by these agencies, when, on the living system they produce no effect at all.

The power of the human body to resist heat is well known. Its natural temperature in this country is not far from 96° Fahr. But Dr. Fordyce, formerly physician to St. Thomas' Hospital, London, went into a room heated to 120° , where he remained twenty minutes, and afterwards, into a room heated to 130° and remained fifteen minutes while the thermometer in his *hand* rose only to 100° . Sir Joseph Banks, Dr. Solander and Sir Charles Blagden, remained several minutes in a room heated to between 196° and 211° , the temperature at which water boils; and the latter of the above gentlemen remained eight minutes in a room heated to 260° . We have accounts of a young female at Rochefoucault, who was in the habit of staying ten and twelve minutes at a time in an oven heated to 276° , and Tillet and Duhamel inform us that they bore a heat of 290° for nearly five minutes.

Chantry, the sculptor, often entered his furnace, when heated for drying his mould, to 320° , and his workmen did the same with impunity when the thermometer was up to 340° .

A dog of moderate size was subjected to a heat of 220° .—The only signs of distress was holding out the tongue, and in 30 minutes the heat was 236° . On being taken out, the bottom of the basket was found wet with saliva. By the same heat, beef steaks were cooked in thirty minutes, and in twenty, eggs were roasted hard.

Most of my readers, have probably, heard of Mons. Chabert, the "fire king," and who, as is stated by Dr. Dunglison, entered an oven when the heat was raised above 400° .

And we find the living body possessed also, of the same power to generate caloric. We have seen that its natural temperature is about 96° ; but in the account of Capt. Parry's voyage to the arctic seas, we are told that his crew were frequently exposed to a temperature 50° below zero, and 150 below that of their own bodies, without being frozen!

We may be told, we know, that heat is resisted by the process of evaporation. But what carries on this process? Or, what causes the living body to evaporate more than the dead piece of flesh? The two put into the oven together, the latter is cooked, while the former remains in the same temperature unchanged.

This astonishing power is attributable to nothing but the laws of animal life.

It is also susceptible of the clearest demonstration, that life controls the forces of the electric fluid. Most persons have noticed the sparks which are often emitted from the hair of a cat, when it is rubbed in very cold weather; and a similar phenomenon is also seen, on taking off flannel drawers, &c. from the human body.

A steel needle, plunged into a nerve, becomes *magnetic*; and on being withdrawn, it is found to have the power of attracting light substances.

Muller affirms, that efficient galvanic piles may be formed from organic animal substances, without the use of metals.—Wienholm states that he has seen sparks obtained by bringing the divided ends of two nerves together. The electrical properties of the torpedo, and a species of eel, are also well known. The *gymnotus*, for instance, it would seem, possesses a complete galvanic battery. Two troughs are found on each side of the spine, separated from each other by a ligament extending the whole length of the fish; and the resemblance of this apparatus to the galvanic pile, is certainly very remarkable.

A lady whom I cured of a most severe attack of neural-

gia, by Pathetism, was often known to have noises in the front part of her head, which sounded exactly like the discharge of electrical sparks. And I know another lady, who, when indisposed a year or two since, gave off sparks from her body whenever she was approached by the physician who attended her. She was, at the time, partially deranged.

Dr. W. H. Muller, of Pittsburg, Pa., has demonstrated the evolutions of electricity from the human body, *in certain conditions*, by a series of original experiments, a full account of which may be seen in the Magnet for February, 1843. As those experiments seem to have been more decisive than any others of the kind, so far as I know, and as the conclusions derivable from them, are directly in favor of the theory now under notice, I think it proper to give Dr. Muller's account, in his own words. It is as follows:

"Before mentioning more particularly the conditions to be attended to for a successful trial of the experiment, I must state, that this evolution of electricity is entirely independent of any friction between the clothes and skin. That so far from this being the case, not the smallest appreciable quantity can be produced by any friction that can be made by the clothes against the skin, though the body and limbs be moved slowly or quickly in every direction. I have, also, when undressed and insulated, with one hand on the electrometer, rubbed the surface of the body with flannel or cotton without causing the slightest movement of the gold leaf.

"The conditions spoken of are as follows: First a proper dryness of the air,—hence a situation in front of a good fire is preferable. As a very cold air is generally very dry, also, the experiment has succeeded at an open window, when the thermometer stood at 38° ; but as here the air soon derived moisture from the room or the body, the electricity of the latter was so soon carried off, that it was gone before I could touch the electrometer twice, after rising from the chair. But, before the fire, I could count slowly forty or fifty, after rising, before I had parted with the electricity evolved by the act of rising. It was for want of attention to having the air dry, and to my overlooking a cause of moisture, that I was, at first, in doubt whether the electricity did in fact arise from the body without the aid of clothing. I had succeeded once or twice, perfectly, I thought, in affecting the electrometer, when trying the experiment before the fire, undressed; but I afterwards failed continually, until I ascertained that by walk-

ing a few moments in the cool side of the room, and then trying the experiment before the fire—I found it succeeded completely. I repeated this often, and always with the same result. The cause of my former failure was owing to the increased evaporation of moisture from the skin, produced by the heat of the fire; by cooling the surface, and then trying the experiment before the fire, where the air was dry, I could affect the electrometer each time I rose and sat, until the heat had produced a too copious exhalation from the skin to allow the electricity to remain on the body. For the same reason, I have very rarely been able to affect the electrometer after returning from a walk, the cutaneous exhalation carrying off the electric fluid as fast as it was formed.—Secondly, the position requisite. This is as follows: place the electrometer over the mantel-piece over a good fire. Take a common sized chair, of such a height that the feet resting on the floor, the thighs shall be horizontal. Sit towards the front edge of the chair and lean back, so as to have the trunk of the body quite relaxed; then rise quickly, and touch the cover of the electrometer. The leaf or leaves will scarcely fail to indicate the presence of electricity. If the first trial should fail, it will be owing to the non-observance of some of the above conditions. A second or third attempt *must* succeed. The electrometer may be placed on a table before the fire; the experimenter, seated on a chair near it, may place his hand on the cover, and then, after leaning back, he should lean a little forwards and rise quickly, or but partly assume the erect position. At the instant of rising, and very often at that of sitting again, the electrometer will indicate a large amount of electricity. I have charged with as much as could be detected by the instrument, by thus alternately rising and sitting. By the application of the jar, however, the leaf has never moved more than half an inch, while by keeping the finger on the electrometer while I thus rose and sat, I could as before stated, cause a continual flight of the leaf to and fro thro' an inch or more. I have hitherto found my own electricity positive, and I have a suspicion that the electricity is different according as I rise up or sit down. This shall be decided in future.

“It is indispensable, that the chair be neither too high nor low. If the chair with which I succeed when in its proper position, be turned on its side, making it lower, and I then sit down and rise, the electrometer is not affected. Neither have I succeeded by rising from a rocking chair; at the suggestion of a friend the effect of sitting upon pillows as upon non-conductors, was tried; and it was found that, insulation aside, the *yielding* nature of the articles diminishes the indication of electricity. If the chair be placed upon pillows, and

also if the feet of the experimenter sit on a pillow placed in the seat, or against the back of the chair, the effects on the electrometer are irregular, or for the most part small. Any position in short which does not call into action the proper muscles, or impedes their complete action, entirely prevents or lessens the developement of electricity. Lowering the body, so that it rests upon the heels, and then rising and touching the instrument, will be as void of influence on the leaf, as movement from any other position than the one described. Complete insulation, by placing the legs of the chair in glass tumblers, and the feet on pillows, seems to increase the electricity."

Now, if it should be assumed that the above experiments go to show, that life itself is electricity, I reply :—

(1.) That this assumption does not enable us to explain how it is that this (life) electricity is *evolved* merely by rising up from a peculiar position, and stretching out the hand in the way above described. If muscular action evolves life, why should it not be much more evolved, in the act of rising up from a recumbent posture; or in the act of lifting some heavy body? But in such acts, it does not appear that any electricity was evolved.

(2.) The electrical, galvanic, or magnetic forces, as far as known, do not amount to what we do know of the *vital* forces. No effects have been produced by the action of electricity upon matter, which would render it capable of resisting heat, as we have seen the living body has the power of doing.

(3.) Admitting life to be either of the ordinary *imponderable fluids*, it should follow that it would be modified, controlled, destroyed or restored by their application to the human system, in innumerable cases, where they are not now known to produce any effects whatever. Friction of an electric, produces electricity; but no such results follow the friction of the living body. The application of an ordinary magnet produces no effects, though it be ever so powerful, except in a few isolated cases, where there is a peculiar state of susceptibility, developed by disease, or the process of pathetising. And even, when persons are susceptible to any peculiar influences from the imponderable fluids, it is found that their effects do not agree in any two cases, nor scarcely in any two experiments, at differ-

ent times, upon the same person; facts which can never be accounted for on the supposition that animal life is nothing more than electricity. And, on this hypothesis, how can it be shown that in certain cases, at least, we should not be able to restore life by a galvanic battery? It is not known that death, or the mere cessation of life, produces any change of structure in any part of the system; and in cases of death by fright or excessive joy, why should not life be restored by an application of the ordinary electrical forces?

(4.) The forces of the different imponderable fluids may constitute some of the *agencies* by which life *performs* its *functions*; but this does not prove that these agencies constitute life, any more than the pen with which these lines are written could be proved to be the mind by which it is moved.

(5.) This assumption is sufficiently confuted by anatomy. Bischoff has proved, that the nerves are among the *worst* possible conductors of electricity or galvanism; from which it follows, that the fluids can neither be life, nor the sole agent by which its functions are carried on. This fact will be made to appear more fully in the chapter on Pathetism.

We observe,

3. THAT LIFE HAS LAWS OF ITS OWN, WHICH, THOUGH THEY MAY BE SIMILAR TO THE ELECTRICAL FORCES, YET THEY CANNOT BE IDENTIFIED WITH ANYTHING BUT LIFE ITSELF.

(1.) All animal life has more or less motion. But it is not necessarily so with the imponderable fluids. The magnetic forces *may* exist in any degree, without producing motion at all. True, we can detect these forces only by their effects on matter, as they may *appear* when two kinds of matter without life, are brought into a particular relation to each other; but no relation between different qualities of any *inanimate* matter has ever produced animal life.

(2.) Moisture and heat are often necessary conditions of animal life. But the magnetic forces may exist where neither moisture nor heat can be detected.

(3.) It has never been proved that *sound* has any influence over the galvanic forces. But we know that mere sound may not only produce all the passions and feelings of

which the human mind is known to be susceptible, but it has, in some cases, produced instant death, as in cases of threats or fright, as will be fully shown in the succeeding chapter.

These facts illustrate laws *peculiar* to living bodies, and which therefore, cannot be affirmed of the mere electric or magnetic forces.

(4.) But it might be thought that these results are peculiar, only to those who have *minds* or *reason*; and that it is this faculty which is operated on by the magnetic forces, and the mind reacts on these forces, and thus extinguishes life.— This comes quite near to what is called reasoning in a circle. That the mind is not the life is plain; and we further admit, that the mind may affect the life, but *how* this is done is the thing to be proved. It has never been proved that the ordinary magnetic forces were ever controlled by mind, merely, and hence it is not sufficient to assume, that the mind destroys life, by operating on these forces.

But to prove that life, may, as it were, be shaken or extinguished out of the system, by comparatively slight causes, when the mind can have no agency in the result. Dr. R. Nelson, of this city, states that he has noticed, that persons hit by cannon or musket balls, after the balls had spent their forces, are often most shockingly mangled and torn to pieces; but yet, they live, for a longer or shorter time. But when the body is struck by the ball immediately on its discharge from the cannon, the person is killed *instantly*, though the system may scarcely be injured at all.

(5.) Another law peculiar to animal life, may be found in the sense of *feeling*. This peculiar sense seems to have been given for the preservation of the system from danger, and injury of every kind. And yet, we find the more essential any part in the vital economy is, the more insensible it is, and the less susceptible to the sense of feeling from mere touch or violence from contact with any other substance. Even the heart, the centre of the circulating organs which attracts and propels the blood throughout the entire system, does not seem to possess, itself, any feeling, by which it can detect the touch

of any external object, and this same insensibility seems to pervade all those organs most essential to life and health.—And the brain, and indeed, the entire nervous system, may be injured to any extent, without any sensation of pain in those organs. The brain may, and has been entirely destroyed, without destroying life at the same time. In cases of difficult labor, the brain of the fœtus has been let out of the cranium for the purpose of procuring delivery, and yet the infant lived for some hours after birth. Dr. Nelson before referred to, narrates one or two cases of this kind, which occurred in his own practice. And a case is referred to in Graham's Science of Human Life, where the fœtus was born *alive* without any brain, or the least semblance of a spinal marrow.*

Now, how does it come to pass, if the galvanic forces constitute life, and these forces are conducted by the nervous system, we say how does it come to pass, that the nerves have no sensation except on the surface of the system? Why have not the *nerves*, or the electric fluid in the nerves, as much sensation in one place as another? How is it that the optic nerve is so insensible to everything but light? How is it that the brain, the grand organ of thought and the centre of all feeling and sensation, itself has no feeling at all? Especially if the brain be a real galvanic battery, which eliminates the vital energy which *feels*, how shall we account for it, that that important organ may be cut and, in fact, taken out of the cranium, without giving so much sense of pain even as the mere prick of a pin on the surface of the hand? Is it not too plain to be doubted, that if electricity constituted animal life, every part of the system should be alike sensitive to pain from contact with any disturbing body? Indeed, we should suppose, that in those portions where we could find the greatest amount of nervous matter, we should find the most electricity, and consequently, the highest *sense of feeling* from touch.—

* It is said that brainless fœtuses are not uncommon; and we have the description of a case by Dr. Mayer, of Berlin, where one was born without either brain, spinal chord, or enciphalo-spinal nerves.—There was one nervous twig accompanying the venal artery, and arising, apparently from the venal plexus. Other cases have been known where, though some of the cerebral organs were evolved, yet no nerves could be discovered.

But, on examination we find the state of things directly the reverse of this. The nerves themselves, have no more feeling than dead matter, except upon the surface of the system, and as we shall see, there are conditions of the living system in which the nerves of sensation are deprived of this function, a phenomenon which can satisfactorily be accounted for, only upon the supposition, that life is an *element*, governed and perpetuated by laws of its own. If it be objected that this element has never been seen, we answer, neither has the forces of the magnet ever been seen. And yet, who doubts of their existence?

In the succeeding chapter, some of the laws will be made to appear, by which living bodies are *affected*, and by which those results are induced, which we class under the terms explained in the preceding pages.

CHAPTER III.

SUSCEPTIBILITY.

In treating on the susceptibilities of the living body, we enter upon a field, which has not, I believe, been so thoroughly explored, as many other questions involved in the subject of human physiology. And yet, if I mistake not, it will be found to be one of immense importance, as it is connected with everything, which relates to human weal or wo. There is no pain or pleasure, no feeling, emotion, or passion common to our nature, but has to do with that quality of the living body which I denominate *susceptibility*. And in a word, all the results produced by any agency, whatever it may be, when exerted upon the mind or body, depend entirely, upon this quality of the human system.

1. THIS SUSCEPTIBILITY IS PECULIAR TO ANIMAL LIFE.

No agencies are known, by which any effects are produced, of the kind now under consideration, upon a dead body. Hence, it appears that all the influence ever excited upon the human system by pathetism, depended upon this peculiar *quality* of the system.

1. *Medicine produces no effects except by its power over this susceptibility.*

But why should not the stomach, and other portions of the system, immediately after death, be affected by medicine? Who has ever been able to answer this question? Indeed, we know, that while life remains, in certain cases, the most powerful drugs in the *materia medica* produce no effect at all. A case is on record of a man being engaged in alchemy, who could take *four ounces* of sweetened and sublimated mercury, without being purged. The only reason that can be assigned in such cases, is that the *vital forces* become so far destroyed or annihilated, that medicine cannot reach them; and from

which it follows that the principle or susceptibility on which medicine operates in any case, is this quality, and which is peculiar to animal life; and certainly, the various theories of *medicine* are just as much responsible for their failure, as pathetism, when *this* agency is found inadequate to produce any desirable change in the health of the system. It will be found on enquiry, that the beneficial results of medicine, in any given case, are nearly or quite as *uncertain*, as those attending the ordinary process of pathetising for the cure of disease.

2. The effects of medicine are not only known to be *extremely uncertain*, but *widely different in different persons*, and the effects vary at different times on the same system.

This, we are told, depends upon the *idiosyncrasy* of the patient, or that peculiar state of the constitution by virtue of which one feels a like or a dislike, or an indifference towards any given object. It is precisely so with pathetism; and we can no more account for these different dispositions in different individuals, than for the difference in the effects produced by manipulating the human system.

3. *All the emotions of pleasure or pain are produced through this susceptibility.*

I do not, now, assume to tell, in what peculiar *qualities* or combinations of matter, this susceptibility consists; but I affirm what every one knows, when I say, that there is a vast difference in the degrees to which different persons will be affected, agreeably or otherwise, by the same agency. Sensation has been considered as the condition of self consciousness, which presupposes nothing more than life, for its existence. But we have seen that there *may* be life, where there is no susceptibility; and this shows that sensation depends on a peculiar condition of life, which is nothing more nor less than the susceptibility, upon which we operate in producing pleasure or pain. And when we produce any kind of sensation in the mind of another through the eye or ear, or by a blow upon the body, there is really just as much mystery in the immediate *agency* by which an impression is produced upon the mind, in this case, as there is when we put a person into a state of sleep by merely holding the hand on the head. All we know is, that certain results follow certain means used.

4. *No change of any kind is brought about in the living body without operating on this susceptibility.*

It is not reached through any one organ alone, but is diffused throughout the entire system. Nor is it reached with equal facility by the same means in different persons. One is found quite difficult to be affected by the ordinary course of medical treatment, and he is relieved at once by pathetising. The strains of music which melt and move the soul of one, have no effect at all upon another, who would at the same time be affected to tears, at the sight of human suffering.

A knowledge of this quality of the living body will account for the diseases produced by *contagion* or *infection*; for, whether the substance producing the change, be received into the system, through the stomach or lungs, or the pores of the skin, this is the medium through which the change is made, whether the agents be material substances, or those only, which produce feeling, emotion, passion, or change of any kind in the human mind.

2. THERE IS A RECIPROCAL INFLUENCE BETWEEN THIS SUSCEPTIBILITY AND THE HUMAN MIND.

I use the term *mind* to signify an *intellectual, intelligent power*, which is not predicable of mere animal life. Life is not intelligence. But that self-determining power in man, denominated the *mind*, is certainly manifested through the body, and all we know of its nature, we acquire through those organs, upon the healthy functions of which, it is dependent, from first to last, for the integrity of its deductions. For, to whatever standard we appeal, for the purpose of determining its nature and powers, we do so in the exercise of the cerebral functions, and whether we correctly apprehend what is admitted to be a divine revelation on this question or not, must depend upon the healthy state of those organs, through which the conclusions of the mind are manifested.

(1.) The dependence of mind upon the developments of this susceptibility. Where is the mind of the fœtus or of the child just born? Where is the mind of the infant, or the idiot, fifty years old? It is agreed on all hands, that in these cases, there are no *manifestations* of mind. As in the vege-

table kingdom, those leaves which appear first, and are nearest the earth, are less matured, and soonest decay, while the flower and ripened seed require time for their full development; so in the human species: in infancy we find little or no appearance of mind, till, by age, diet and exercise, the physical organs become sufficiently developed for its various manifestations. At first, its faint gleamings are perceived, which correspond with the infantile proportions of the body, and up through childhood and youth, its powers may be traced in connection with the growth and health of the cerebral organs. When the body has reached the meridian of its development, in a healthy state, the mind also, is seen in the full exercise of its powers, and from this period, down through the decrepitude of age, it sympathises with the infirmities of the body. To notice a few things a little more in detail:

Sexual difference. In the male, the bones and muscles are stronger, and more regular, the arterial and cerebral systems are more developed; the lungs are stronger, and hence, more compass of voice and respiration. On the contrary, women will generally be found inferior in the bones and muscles, with larger venous and ganglionic systems. In men, the coarser, rougher qualities—in women, the finer and more delicate.—And hence, a corresponding psychological difference. Man is disposed for labor, courage, liberty and power. Woman, for purity, kindness and patience.

The temperaments. As there are as many temperaments, properly speaking, as there are differences in the qualities of the physical systems of different persons, we have no terms by which they could be designated. The term *temperament*, from *tempero*, to mix together, has been used to signify that peculiar combination of the materials constituting the difference in the susceptibilities and dispositions of different individuals. Hence, we say that in a person of *sanguine* temperament, there is a corresponding development of hope and joy. In the *nervous*, the cerebral portions correspond; in the *bilious*, hard muscle, large firmness and energy; in the *lymphatic*, deficiency in firmness and industry, love of ease and inactivity. Diet makes a difference. It is well known, that

all substances taken into the human stomach, which produce over excitement, or cause any derangement in the nervous system, invariably affect the mental powers more or less.— Instance the effects of alcohol, tobacco and opium. More than one-third of all the cases of *insanity*, in this country and in Europe, are produced by the use of intoxicating liquors; and in China, similar results follow the use of opium. And will any one assume, that insanity, in these cases, is not caused by the influence of the physical organs over the mind?— Poisonous food frequently causes delirium. Two monks ate water-hemlock. Both immediately complained of thirst, and plunged into the water, one thinking himself a goose, and the other that he was a duck, and both affirming, that they could live no where else but in the water.*

And who does not know the weakening effects of hunger upon the mind, and the exhilaration which follows a full meal? The difference between a flesh and a vegetable diet is well known. Flesh is more stimulating, producing a bilious, active, passionate, and sensual disposition; while a vegetable diet is favorable to the cultivation of a meek, subdued, childlike feeling, as is abundantly proved by the accounts we have of nations, communities, and individuals who have confined themselves to this way of living.

The state of the health. The power of *thought* depends upon the state of the nervous system. Every one knows how difficult it is to put forth any considerable mental effort when the stomach or any of the vital organs are much diseased.— Severe pain in the head distracts the thoughts, and fevers frequently rage to such a degree, that mental derangement, and even raving madness ensues. A slight blow upon the head, changes entirely the activity of the mind, and at other times, instant death is the result.

The want of sleep enfeebles the mind, and when wakefulness is continued too long, in some cases, it causes mental derangement.

The effects of the air, the new moon and planets, have long been known, and more or less acknowledged, by all classes of

* Dr. Rauch.

people. Indeed, the effects of climate are not more visible, scarcely, upon the vegetable or animal kingdoms, than upon the minds of men. Insanity has often been known to follow, what is called, a "stroke of the sun;" and that it has an influence on animal life seems now to be generally admitted.

M. Arago, in his account to the Academy of Sciences of the solar eclipse of 8th July, 1842, states, that he had often heard accounts of birds dying from the mere influence of an eclipse of the sun; but could scarcely credit the statement, as they could only die from fear; and the discharge of a gun ought to frighten them more, and yet it is certain that it does not kill them, unless they are actually hit. One of M. Arago's friends made the following experiment: He placed five linnets in a cage, they were lively and active, and fed up to the moment of the eclipse; when the eclipse had terminated three of them were dead.

A dog was kept fasting from morning; immediately before the eclipse he was offered food, and fell on it greedily; but when the dusk commenced he suddenly ceased eating.

The horned cattle in the fields seemed affected with a kind of vague terror; during the eclipse they lay down in a circle, their heads being arranged toward the circumference, as if to face a common danger.

The darkness influenced even the smaller animals. M. Froisse observed a number of mice which were running briskly, become suddenly still when the eclipse began.

The notion prevailed among the ancients, that the influence of the moon had a tendency to produce insanity, and hence this disease has taken the name of lunacy from *luna* the moon.

The extremes of heat and cold are known to be unfavorable to the development of extraordinary intellectual powers. Too great a degree of heat relaxes the nervous and muscular systems; and by too much cold they are contracted, and corresponding effects are produced upon the mind. It is in the temperate zones that we find the greatest exhibitions of intellectual power. It is here that we find it luxuriating in the majesty of its strength, and where, in the exercise of its attributes, it explores the hidden mysteries of nature, soaring in

illimitable space, with the stars and planetary worlds, or commanding the laws which control the red winged lightning of heaven.

(2.) The influence of the mind over the susceptibility.—The effects of joy are well known under this emotion, the respiration becomes easy, the face is flushed with color, and the entire system seems animated with new life. Anger has been known both to cure and produce disease. This emotion is no sooner excited in the mind, than its influence is shown in the face, and throughout the muscular system. The eye is seen to change quickly, the teeth grate, and the hand is clenched in correspondence with this state of the mind. The vascular system, also, partakes of the general excitement. The blood is quickened in its circulation, and hence the heat of the body is increased. The secretions become more copious; and in some cases, their quality is perceptibly changed. Indeed, most of the emotions and passions of the human mind, are usually shown in the countenance, and excite more or less influence over the nervous system; and hence the origin of the various theories of physiognomy which have been put forth from time to time.

One of the most mysterious agencies in nature is that which is communicated from the mind through the voice. All the emotions of the heart have corresponding tones of voice. In joy it is clear and full; in anger loud and rough; in fear, it is tremulous and low, as it is, also, under deep and tender emotions. And it is worthy of remark, that those gestures which are true to nature, are at first, perfectly involuntary. In fear, the face grows pale; in fright, the hands are raised and drawn back; in devotion or joy, the hands are raised and clasped.—So in the look of the eye, the turn of the lip, wrinkling of the forehead, emotion is frequently expressed, with more emphasis than could be done in words, alone. One hand open, and stretched out, salutes; both open and extended, invite; and with one finger we direct, point out, or command. The head affirms or assents by nodding, and denies by shaking. Bending forward, it indicates devotion, or modesty, and thus the whole body is made to talk and express the emotions of the *mind*.

Volumes might be filled, demonstrating this power, but my limits will only allow a partial view of this subject.

A skilful physician related to me the following:—

A man called on him for medical advice, complaining that all the medicines he had taken for some time previous, had the effect of an aperient. He seemed to think he had been imposed upon by the doctors, and begged to know of my friend Dr. W. if *he* could not give him something that would benefit him without producing this effect. The Doctor assured him that he had no doubt at all, that he could gratify him in this respect. Accordingly, he retired to another room, and prepared a few pills, entirely of *wheat bread*, and handed them to the patient, with suitable directions. In the course of a few days, the Doctor fell in with the patient, and received from him a severe castigation. “Why, Doctor,” said he, “those *pills* you gave me physicked me almost to death. I never took any thing before so powerful!”

I reminded the Doctor that he had made a mistake in giving the patient *pills* of any kind. Had the same substance been given in the form of powders, probably it would have produced no effect at all.

I had the following from a scientific gentleman of this city. A little daughter of his was indisposed, and he gave her, for an aperient, a little pure water slightly coloured with wine. She thought it was tincture of rhubarb, and it affected her accordingly.

I had a patient, a very intelligent lady, who was so susceptible that she would drink from a tumbler of clear water, and believe what she drank to be lemonade, coffee, brandy, or any other liquid which I told her it was; and this she did in the waking state. I once gave her a tumbler of water slightly coloured with molasses, telling her it was senna; and she declared it to be senna, on drinking it, and it produced the desired effect.

Burton (Anat. Mel. vol. 1, p. 221,) says, a person who has often taken nauseating medicines, will be nauseated by the *thought* of receiving it again; and a *thought* has often proved a powerful emetic. And not only has a thought proved an

emetic, but the sight of a distasteful cathartic has for some time operated the same, as when that medicine is actually received into the stomach, as testified by many experienced physicians, especially as related by Cornelius Agrippa (out of Gulielmus Parisiensus). In another place he says:

“Men, if they see but another man tremble, giddy, or sick of some fearful disease, their apprehension and fear are so strong in this kind, that they will have such a disease. Or if by some soothsayer, wise man, fortune teller, or physician, they be told they shall have such a disease, they will so seriously apprehend it, that they will instantly labour of it—a thing familiar in China (saith Riccius the Jesuit). If it be told them that they shall be sick on such a day, when that day comes they will surely be sick, and will be so terribly afflicted, that sometimes they will die upon it.”

A fact is stated in Lockhart's life of Sir Walter Scott, which shows the power of mind over the system, to prevent at will, the usual effects of medicine. It is related by Scott himself, of a common farmer, whose father had given him a quantity of laudanum, instead of some other medicine. This mistake was instantly discovered; but the young man had sufficient energy and force of mind to resist the operation of the drug. While all around him were stupid with fear, he started up, saddled his horse, and rode to Selkirk, a distance of six or seven miles, thus saving the time that the doctor must have taken in coming to him. His agony of mind prevented the operation of the opiate until he had alighted, when it instantly began to operate. He was, however, perfectly recovered.

Some ten years ago, while laboring under a severe inflammation of the throat and lungs, a friend prepared for me a mixture of molasses and camphor. Soon after taking it I began to feel strangely, and, on inquiry, found that I had actually eaten a piece of the gum, larger than a nutmeg. I felt, of course, a little alarmed, but immediately *resolved* that it should not overcome the nervous system, inasmuch as I had an appointment to appear before a public meeting that evening. I walked, during an hour or so, resisting all the while the action of the camphor by a determined resolution not to be overcome by it; and, without any difficulty, I succeeded,

to the no small surprise of the friends who had become cognizant of what I had done.

Dr. James Gregory ordered an opiate to a young man, to relieve sleepless nights, under which he had suffered in convalescence from fever. He informed the patient that he had prescribed an *anodyne*, to be taken at bedtime; but the invalid being somewhat deaf, understood him to say an *aperient*. Next morning, on the doctor's inquiring whether he had slept after the anodyne, he replied "Anodyne! I thought it was an aperient, and it has indeed operated briskly."

A female lunatic was admitted into the county asylum, at Hanwell, under Sir William Ellis. She imagined that she was labouring under a complaint that required the use of mercury; but Sir William, finding the idea of that disease was an insane delusion, yet considering that flattering the opinion of the lunatic to a certain degree, would be favorable to the recovery of her reason, ordered *bread pills* for her, and called them mercurial pills. After a few days she was salivated, and the pills were discontinued. On again ordering them after the salivation had subsided, she was a second time affected in the same manner; and this again happened on the recurrence to the use of the pills a third time.

A physician states, that a lady under his care assured him that opium, in any form, always caused headache, and restlessness, and vomiting on the following morning; and on prescribing laudanum for her, under its usual name, "*tinctura opii*," he found that her account of its effects was correct; but on prescribing it under the term "*tinctura thebaica*," which she did not understand, (she read every prescription,) it produced its usual salutary effect, and was continued for some time without inducing the smallest inordinate action.

I have heard of a case, in which the hair was changed, from black to gray, in a few hours, merely by the effects of fear.

And, numerous cases of death, have occurred, produced merely by the influence of mind over this susceptibility.

The *Areekee* are a sect among the heathen in New Zealand, described by Mr. White, a Wesleyan Missionary, who

says: "They pretend to have intercourse with departed spirits, by which they are able to kill, by incantation, any person on whom their anger may fall; and it is a fact," adds Mr. White, "that numbers fall a prey to their confidence in the efficacies of the curses of these men, and pine under the influence of despair and die."—*Miss. Her. vol. 23, p. 314.*

Burton, (Anat. of Mel.) speaks of a Jew in France, who walked by chance, in the dark, over a dangerous passage or plank, that lay over a brook, without harm; the next day perceiving what danger he had been in, he dropped down dead. He further records that at Basil, a child died through fright by seeing a malefactor hung in gibbets; and that in the same town, beyond the Rhine, another child died on seeing a carcase taken from the grave.

The case of the criminal who was condemned to die, is well known. The physicians obtained leave to experiment upon him in the following manner: He was blindfolded, and made to *believe* that he was to be bled to death. A vessel of water was placed near him, and when his arm had been operated upon, as if a vein had been opened, the water was set to running, so that the noise of the small stream sounded like the blood issuing from the arm. In a few minutes the patient began to complain of faintness. His pulse grew more and more feeble, till in a short time he actually expired, and this, too, when not one drop of blood had been drawn from his veins.

It is recorded of a Roman mother, that she instantly died of joy, on meeting her son as he returned from the battle of Cannæ, where she supposed he had been slain by the veterans of Hannibal.

A lady in Kentucky, the wife of David Prentiss, Esq. fell dead in an instant, while reading a letter which brought her the news of her husband's death.

Well authenticated cases are upon record, which go to show that the mind may sometimes assume such an astonishing degree of power over this susceptibility, as to control the involuntary muscles, and indeed, suspend the entire functions of the animal system. It is said of Betterton, an actor, that

he could, at will, render his face pale, and perfectly bloodless ; and a case is mentioned by Blumenbach, of a man, who could in the same way, control the action of his own stomach. A German, now living, by the name of Kerner, it is said,* possesses the power of suspending the action of his own heart ; and I have frequently done the same thing for a few moments, in some cases of somniphathy.

A most extraordinary instance, illustrating this power, is given by Dr. Cheyne.† It was in the case of Col. Townshend, who, after having been sometime indisposed, sent for Drs. Baynard and Cheyne, the latter of whom gives the following account of what they heard and saw :—

“ He told us he had sent for us to give him some account of an odd sensation he had for some time observed and felt in himself: he could die or expire when he pleased, and yet by an effort, or somehow, he could come to life again ; which it seems he had sometimes tried before he had sent for us. We heard this with surprise ; but as it was not to be accounted for from any common principles, we could hardly believe the fact as he related it, much less give any account of it, unless he should please to make the experiment before us, which we were unwilling he should do, lest in his weak condition he might carry it too far. He continued to talk very distinctly and sensibly above a quarter of an hour about this (to him) surprising sensation, and insisted so much on our seeing the trial made, that we were at last forced to comply. We all three felt his pulse first ; it was distinct though small and thready, and his heart had its usual beating. He composed himself on his back, and lay in a still posture some time ; while I held his right hand, Dr. Baynard laid his hand on his heart, and Mr. Skrine held a clean looking glass to his mouth. I found his pulse sink gradually, till at last I could not feel any by the most exact and nice touch. Dr. Baynard could not feel the least motion of his heart, nor Mr. Skrine the least soil of breath on the bright mirror he held to his mouth ; then each of us by turns examined his arm, heart, and breath, but could not by the nicest scrutiny discover the least symptoms of life in him. We reasoned a long time about this odd appearance as well as we could, and all of us judging it inexplicable and unaccountable ; and finding that he still continued in that condition, we began to conclude that he had

* London Lancet, Feb. 18, 1843.

† Treatise on Nervous Diseases, p. 307.

indeed carried the experiment too far, and at last were satisfied he was actually dead, and were just ready to leave him. This continued about half an hour, by 9 o'clock in the morning, in autumn. As we were going away, we observed some motion about the body, and upon examination, found his pulse and the motion of his heart returning; he began to breathe gently, and speak softly: we were all astonished to the last degree at this unexpected change, and after some further conversation with him and among ourselves, we went away fully satisfied as to all the particulars of this fact, but confounded and puzzled, and not able to form any rational scheme that might account for it. He afterwards called for his attorney, added a codicil to his will, settled legacies on his servants, received the sacrament, and calmly and composedly expired about five and six o'clock that evening."

A case was related some two years since by an eminent physician to his medical class, in Boston, Mass., substantially as follows. A lady applied to him for the treatment of a cancer upon the right side of her face, about the size of a two-quart bottle. Upon deciding that an operation would be necessary to save her life, she expressed great unwillingness to submit to it, and asked him if he could not give her something that would lessen the pain when it was performed. To gratify her he gave her something for this purpose. Three days after, she came to him again, and informed him, that she had fortunately, heard of a cure, and which she would try, with his approval. It was this—that if she should apply the hand of a *dead man* to the cancer, three mornings in succession, it would certainly prove effectual; a neighbor had just died, thus affording an opportunity for the trial.

At first, the Dr. was disposed to laugh at her notions, but finally, concluded it best to yield to them, and so expressed a hope that the means proposed might prove successful. In about three weeks afterwards, this same woman returned, and putting her hand up to her face where the cancer *had been*, said, "Dr., look here!" And sure enough, the Dr. on examination, found the cancer had wholly disappeared.

The above cases show most clearly, the astonishing influence which the mind often exerts over one's own nervous system. And that the mind of one person may exert an influ-

ence over the susceptibility of others, is just as plain as that we are ever affected at all by what we hear or see done by others. How often are whole assemblies of people moved even to tears, by what they see and hear from another, speaking or acting before them. But that peculiar agency by which the speaker transfers his own feelings into the minds of his hearers, is nothing more nor less than the subject of our present inquiry.

The following case will show the power which one mind sometimes acquires over the susceptibility of another, even when the latter does not seem to have any apprehension of what is done to him.

Mr. Forbes, in the 2d vol. of his oriental memoirs, says that—"he was acquainted with a Banian named Lullabhy, the richest man in the city, who was universally believed to possess the power of curing the bite of venomous serpents, by a knowledge peculiar to himself, which he never imparted to another. By this art, he certainly recovered many natives from a desperate state, after being wounded by the *cobra-di-capello* and the scarlet snake of Cubbeer-Burr, without touching the patient, or prescribing any thing inwardly.

"Mr. Gambier, at that time chief of Barache, was extremely incredulous respecting talismans, charms, divinations and preternatural pretensions of the Bramins; and his opinion of Lullabhy was publicly known, when a circumstance in his own garden afforded a fair opportunity of detecting its fallacy. One of the under gardeners was bitten by a *cobra-di-capello*, and pronounced to be in danger. Mr. Gambier was holding a council in an upper pavilion, and at the desire of Mr. Perrott, their second council, immediately sent for Lullabhy, without informing him of the incidents, of which he remained ignorant until ushered into the chief's presence. The gardener was lying on a slight bed of cane rope, in a veranda adjoining the council room.

"Being asked if he could effect a cure, Lullabhy modestly replied, that by God's blessing he trusted he should succeed. The poor wretch was at this time, in great agony and delirious; he afterwards became torpid and speechless; still Lullabhy was not permitted to commence his operations. The members of council anxiously waited the chief's permission, especially, when Lullabhy asserted, that any farther loss of time would render it too late. Mr. Gambier examined the man's pulse by a stop watch, and when convinced that his dissolution was inevitably approaching, he allowed Lullabhy

to exert his influence. After a short silent prayer, Lullabhy in presence of all the company, moved his short dagger over the head of the expiring man, without touching him. The patient continued for some time, motionless; in half an hour his heart began to beat, circulation quickened, and within the hour he moved his limbs and recovered his senses. At the expiration of the third hour, Lullabhy had effected his cure.—The man was sent home to his family, and in a few days recovered from the weakness occasioned by convulsive paroxysms, which probably would neither have been so severe nor of such long continuance, had the counteracting power been sooner applied.”

Of the truth of this account there can be no reasonable doubt, and it is scarcely more extraordinary than many well attested cases of cure by pathetism; though it differs from the common cases of the latter kind, inasmuch as it does not appear, that the operator in this cure, came in contact with his patient, or that he even so much as touched him with his dagger. The laws by which the mind, (and through this the susceptibility,) is affected without contact, will appear in the sequel.

The foregoing facts demonstrate the influence of the mind over health and life. The following are of another class, but show as clearly the power of which I am now speaking.—Cases are well known, where a sudden fright of the mother has left an indelible impression upon the child. Dr. Howship relates the case of a woman who was crossing a frozen river in a state of pregnancy. The ice cracked and burst, and she was terribly frightened. When the child was born, its skin was gaped considerably in several places. The sight of an epileptic has been known to transfer this disease to the fœtus; and a case is reported by Dr. Joslin, in which a child was born with small pox, in consequence of the exposure of its mother, only thirty days previous to the birth of the child, and this too, when the mother had been perfectly secured from varioloid, by vaccination, some thirty years before. There were upon the body of the child, about one hundred and seventy regularly formed small-pox pustules, of the usual size, and filled with a yellowish purulent matter.*

* *New York Lancet*, May 21, 1842.—Two similar cases are given in

The sight of an ugly or disagreeable person has been known to produce an effect upon the features of the embryo. Indeed, this principle is recognised in the bible as governing the susceptibilities of animals. [Gen. 30: 37.] It was acknowledged by the Lacedemonians, when they placed beautiful statues in the rooms with their pregnant wives. It would seem that this susceptibility is greatly increased during the period of gestation. I knew a mother, who, during this state, drank two quarts of brandy in twenty-four hours, without showing any degree of intoxication; and at another time, she ate two quarts or more of raw rice, without any injury. Tulpius speaks of a lady who devoured 1400 herrings during pregnancy; and of a woman who ate twenty pounds of pepper; and another who ate a live carp from head to tail. Another bit off the heads of twelve mullets and ate them; and another who actually murdered her own husband, and after eating what she could, salted the rest for future use.

There is another property of the living body, which it would be unpardonable not to notice in this connection, and especially as it would seem to be so directly connected with the general subject now under consideration. The skin, which covers the entire surface of the body, is filled with innumerable pores, so inconceivably small, that in many places they are scarcely visible to the naked eye. In this covering the nerves of sensation are commenced, but the functions to which I would call the attention of the reader, are those, simply, which are known under the term *perspiration* and *absorption*, or *inhibition*. Life and health could not be continued for any length of time, but for the constant exhalation of a fluid through these pores, amounting in weight to more than one-

the same work for March 26, and April 26, 1842; and another in the London Lancet for Feb. 4, 1842. And from such facts as the following it would seem, that the same law predominates over the susceptibilities of the feathered tribe also. "A hen belonging to Benj. Gallaway, Esq., of Weakley county, Tenn., was some time ago bitten by a rattlesnake, but by proper attention the wound was cured. However, strange to tell, we are informed that every egg laid since that time by this hen has a picture of a rattlesnake represented upon the shell! Mr. Gallaway, who is afraid to use these eggs in the family, has kept them, and will with pleasure exhibit them to the inspection of the incredulous.—N. Y. Sun, April 14, 1843.

half of all the food and drink received into the stomach, and larger, also, than that disposed of by the other secretions.

That various substances are *received* into the system, through the skin, or from the surface of the body, is as well known as any fact connected with human physiology. The hand, immersed in warm water, will absorb between seventy and one hundred grains of the fluid, in the course of one hour; and the weight of the entire system is proportionally increased, by remaining for a short time, completely covered with water.

Seamen, when suffering from thirst, have obtained relief by applying wet clothes to the skin, or bathing even in salt water.

Bathing the head with alcohol will produce intoxication, and metallic quicksilver has been found even in the bones of persons who had been subjected to mercurial frictions. Various medicines and poisons are received into the system by being merely applied to the skin; and from this well-known disposition of the system to *drink in* the substances applied to the surface, a theory of medicine was commenced some three or four centuries before Christ, and which has since received the name of *Iatroleptic*, from the practice of anointing the body, or applying medicine to the surface by friction.

If the system be thus pervious to fluids, how much more so must it be to imponderable gases, or agencies as subtle as magnetism or electricity? If a bladder be filled with hydrogen gas, and suspended in the air, it will be penetrated in a short time by the air with which it is surrounded; and when external agencies are applied to the surface of the body, it is not unreasonable to suppose, but that they may penetrate and affect the vital forces, with equal facility.

Two of the most important pathological facts, demonstrating this susceptibility, we find detailed in the London Lancet for Jan. 14, 1843. They are given by Dr. W. F. Bow, and are as follows:—

“One remarkable phenomenon, incomprehensible without the aid of the law of nervous induction, results from the action on the surface of the body produced by a blister. This

phenomenon I shall describe in the words of the author, who first made me cognizant of it:—‘ Thus I have been informed by a respectable surgeon, that he found on opening the cranium of a patient who had died after a blister had been recently applied, *an inflamed mark, exactly corresponding in shape and size with the external mark of the blister, which penetrating the scalp, and the cranium, was distinctly visible on the dura mater.*’

“ Mr. Porter, in his surgical observations on the diseases of the Larynx and Trachea, expresses himself strongly against the use of blisters in acute laryngites, particularly when applied to the neighborhood of the part. He says they cannot be resorted to at an early period without doing considerable mischief. A case is related when, in acute pneumonia, the application of a blister was followed by an aggravation of the symptoms and death. On dissection, a portion of the surface of the lung *exactly corresponding to the size and shape of the blister, was found in a more advanced stage of inflammation than the remaining pulmonary tissue.*

“ I have been told by a gentleman whose opportunities for observation have been frequent, that he has repeatedly seen marks on the pleura, covering the lungs, leaving the size and shape of the blister which had been applied to the chest, and the same on the intestinal peritoneum, of the size and shape of the blister which had been applied to the abdomen.”

And Dr. Bow adds:

“ The knowledge of the fact, that a morbid action artificially produced on the skin, will excite a similar action on an internal surface, is of the highest practical importance; for if we find, that by lessening the contractile power of the capillaries of an internal surface, we may rest assured, that we have also the power of increasing the contractile power of the capillaries of an internal surface, by applying to the adjacent external surface, agents which we know do augment the contractile power of the capillaries of the skin.”

The inferences to be drawn from the foregoing facts, will be seen in the course of the following pages.

3. THE ADAPTATION OF THE DIFFERENT SUSCEPTIBILITIES TO THE ECONOMY AND GENERAL PURPOSES OF LIFE.

In no part of the Great Creator’s works do we see his wisdom and goodness more strikingly exhibited, than in this property of the human system. Thus we find the organic susceptibility of the stomach, is adapted to those articles of food

which by the same plastic hand, have been organized and prepared for the nourishment of the body. And this important organ has with propriety enough, been denominated the conscience of the system; for when in a healthy condition, with what fidelity does the little feelers with which its inner surface is endowed, detect the qualities of the different substances received into it? And with what surprising readiness do its muscular fibres commence their action on these substances, and the whole structure, as it were, becomes agitated in its efforts to digest and dispose of them, according to the wants of the various parts of the body. So if we examine the circulating organs, we shall see the same adaptation in the susceptibility of the heart, veins, arteries, and capillaries. We find in the human species, what we may call a double heart, as it certainly consists of two separate organs, each of which gives motion to a different kind of blood. And as the blood is poured from one of them into the arteries, the extreme elasticity of these little tubes, aid in sending that important fluid into every part of the system. And the same forces assist in circulating the lymph and chyle, and in some cases this subtile power has continued to act for some thirty minutes after death had separated the head from the body.

And how susceptible are the respiratory organs to the presence and properties of air? If we examine the texture and shape of the lungs, together with their functions, and the relation they sustain to the other vital organs, we shall see the truth of this remark.

The same may be said also, of the sensorial functions.—The nerves of sensation commence in the extremes of every portion of the system, so that no part of the surface can be found where they are not; and all centering in the brain, we see their adaptation to the great and important purposes for which they were designed. All the organs of motion also, send their respective nerves up to the same centre, where the mind takes cognizance of the impressions made upon the nerves, and from which the will gives out its mandates to be obeyed by the various parts of the system which have been subjected to its control. In a word, the whole of this suscep-

tibility may, perhaps, be traced, more or less, to the functions of the nervous or ganglionic system. Consisting of so many parts, so minutely and mysteriously constructed, and distributed over the entire body, and all concentrating in the brain, it is curious enough, to see how insensible the brain, nerves and ganglia, themselves are, while they are evidently the medium through which all sensation, emotion, passion, or feeling of any and every kind, which become subjects of recollection and reflection in the human mind.

Hence, it is plain, that the different susceptibilities of the living body, are exactly adapted to the real necessities of the system; and it follows, that if we find one susceptible to the influence of *pathetism*, it is because the system needs its aid in the performance of its various functions; and, on the other hand, if the patient is not susceptible to any influence from this agency, it is because the system does not need it, but having other susceptibilities, it must be relieved by the most appropriate means.

This chapter shall now be concluded, by a few observations designed to assist in judging of what may be denominated the *pathetic* susceptibility; that quality of the system which renders one susceptible of any influence from the process of manipulation.

1. *The Temperament*.—I have before stated, that there may be said to be as many temperaments as there are persons in existence. What I mean is, that the qualities of no two systems are exactly alike, or are affected precisely in the same manner under the same process. The temperament which is most susceptible to the influence of pathetism, is one, which, for distinction's sake, we may denominate the *sympathic*, because it most readily yields to the touch of the human hand. Most somnambulists, and somniloquists, will be found of this temperament. It is most readily recognized as a mixture of the nervous lymphatic, or lymphatic, sanguine, and nervous. In such persons we shall generally notice a bland, blue, or grey eye, with extended pupil; soft muscle; hair tending to hazel, or light sandy color. The mouth will be somewhat wider than ordinary, and the inside of the hand will be found generally cold, or in a state of perspiration.

2. *Phrenological Developments.*—The organs of firmness small, and the occipital and basilar portions, inferior. Persons highly susceptible will usually have the front portion marked on the ordinary phrenological busts as Ideality, large, and fully developed.

There are other marks, which every experienced operator must have noticed, but they are not so easily described.

Various diseases often develope this susceptibility, and render it quite easy to affect persons when indisposed, who are not influenced, by this agency at all, in a state of good health.

The manner of testing a person's susceptibility, is described in the process of pathetising, in a succeeding chapter. There is, however, a still more simple process, as follows :

Let the subject be seated where one of the hands and arms may lay perfectly easy. The patient should consent to give you complete control of that hand, and cease to exercise his will over it in any way. Then pass your hand, gently, from the shoulder down inside of his, to the ends of the fingers. Bring your fingers inside of his, gently, as if you would cause it to follow your own. Let this process be continued, and if the patient be susceptible, the effects will be felt, or seen, in the course of five or ten minutes.*

* Since the above chapter was in type, my attention has been called to Hahneman's *Organon of Homœopathic medicine*, pp. xviii. xx. 193, 199, 200, 202, 207, 208, 211, from which it is perfectly evident, that Hahneman recognized the *principle* of pathetism, (or magnetism,) in the preparation of his medicine ; and not only so, but his infinitesimal doses, when effectual, perform their cures by *this very agency*. So that every consistent Homœopathist is, in fact, a pathist, though he may not be aware of it.

CHAPTER IV.

SYMPATHY AND ANTIPATHY.

It will facilitate the object we have in view, if we next inquire into the nature of those laws of the living body which are concerned in producing what has generally been understood by Sympathy and Antipathy. In the last chapter I have merely taken a cursory view of a few psychological and pathological facts, the most of which have long been well known, though, indeed, it will be acknowledged, I think, that they have not been so well understood, nor has there been so much use made of them in the various medical theories as we might now, suppose, would have been, had correct views more generally obtained with regard to the true science of human life. And, a similar remark may be made of what I am about to offer on the subject of sympathy and antipathy.

I have before shown, that the term sympathy has been used to signify a state of fellow feeling or suffering; when applied to the physical system it has been used to signify the suffering, or state of one part of the body, produced by the state or suffering of another. Without attempting a repetition of all that may be found in medical works on this subject, it will perhaps best subserve my purpose, if I bring to my aid the conclusions to which previous writers have arrived, and add, also, whatever may appear to be connected with these laws, in the examination I have been enabled to give to this part of human physiology. In the use, therefore, which I here make of the term sympathy, it must not only be understood to signify the state of one part which suffers, by the *influence* which another, in a previous state of suffering, extends to it, but also, that influence which one organ, or portion of the system, is found to exert upon another part, whatever its nature may be; and further, the reciprocal in-

fluences which are extended from one part of the body to another, and which harmonise in producing any one effect which may be seen throughout the system generally.

By *antipathy*, must be understood, of course, the reverse of sympathy. The following remark is from Dr. Good :

“ We occasionally meet among mankind, with a sort of sensation altogether wonderful and inexplicable. There are some persons so peculiarly affected by the presence of a particular object, that is neither seen, tasted, heard, smelt or touched, as not only to be conscious of its presence, but to be in agony till it is removed. The vicinity of a cat not unfrequently produces such an effect, and I have been a witness to the most decisive proofs of this in several instances.”

I knew a person who was so much affected with the smell of onions, as to be unable to remain in the house where they were ; and it is said, Henry the Third, of France, could not endure the presence of a cat. Lord Chancellor Bacon fell down in a fit whenever there was an eclipse of the moon ; the philosopher Boyle could not endure the sound of water drawn from a cock. Erasmus trembled at the smell or sight of fish ; Marshall d’Albert fainted at the sight of a sucking pig ; La Mollie la Voyer could not endure the sound of music ; and Shakspeare speaks of some person in his day who could not endure the sound of the bagpipe. The celebrated astronomer Brahe, was totally paralyzed in his limbs at the sight of a live hare ; and we have known intelligent persons who could not endure the sight of a rat. Some persons are peculiarly affected on touching certain kinds of metals, and others are affected in the same way if they touch them only in their imagination. An intelligent lady of my acquaintance had such an antipathy to spiders, that for eight years she retained the sense of disgust and horror, which it gave her, on finding one upon her person.

Now, it is quite certain, that these states of feeling do not depend upon the judgment, but they must have their origin in a peculiarity of the physical nature of each person. So it is in common life. There is, as it were, an atmosphere surrounding every individual, and which you perceive at once, when you approach him. On the first sight of one person,

you feel instinctively repelled, and you do not find it possible to feel pleased with being near to him, or to delight in his company. But, with another person you are delighted at once. You feel an attachment to him, for which you can render no reason at all, no more than you could for the antipathy you felt for the other. All our feelings of love, friendship, and dislike, are founded in this peculiarity of our nature. It is a law of nature to work by opposite forces. Two poles of the same denomination, repel and expand; two opposite poles contract and attract. Two contiguous keys on the piano, harmonise less, than two divided by a third. The attraction grows out of the *relation between the two*, when one possesses *positively*, what is possessed by the other *negatively*. So, nature has provided the two sexes for the propagation of the different species of living bodies, and, it will be found, that parents of the same susceptibilities, have the least issue, and their offspring, if they have any, is generally short lived.

This much premised, observe—

1. THE CORRESPONDENCE OF THE DIFFERENT PARTS, AND THE GENERAL SYMPATHY OF THE WHOLE BODY WITH THE MIND.

I have, already, noticed the reciprocal influence of the body and mind, and we have seen the effects which the one is known to produce upon the other. This influence is shown in the features and form of the body. Hence, in the face of a savage we see a savage mind. With a well formed head we anticipate understanding and strength of intellect. A low, thick head, selfishness and stupidity; a small head, small mind. A large, well developed body, full chest—muscular strength. Round, blunt features, obtuseness of mind; sharp features, hard muscle, correspond with quickness of temper, speech, and action.

Persons of a bilious temperament, will, usually, be found with large firmness, destructiveness, and combativeness.—They may, indeed, have large pity, kindness, and friendship, but the organs first named, either make this temperament, or most generally accompany it. So, we find persons of the sanguine temperament, with large hope; those of the lym-

phatic, with industry, firmness, and will, moderate. And, slight observation will convince us that in every case, a marked correspondence may be traced throughout the mental and physical developments, extending to the face, limbs and trunk of the body, and manifested in the tones, gestures, and general conduct.

2. THERE ARE SYMPATHIES PECULIAR TO DIFFERENT PARTS OF THE SYSTEM, DEPENDING ON THE RELATION WHICH ONE PART SUSTAINS TO ANOTHER.

That is, the part that is said to suffer by sympathy, is affected by its *relation* to some other part, in which the cause of the difficulty really exists. Thus, titillation of the fauces produces vomiting. In this case the stomach is not touched, nor affected, only by sympathy. The same means applied to the nostrils produces motion in the expiratory muscles in the act of sneezing. The sight of food, excites the salivary glands.

A slight increase of action in the stomach, will frequently diminish the action of the brain, and increased mental activity will decrease the action of the stomach. Injury of nerves, just as of any other organs, in proportion to their importance, may affect parts, which they do not supply; but with which they are connected; as amaurosis, and even cataract may follow wounds of the nerves belonging, not to the eye, but to the face; and convulsions may follow wounds of the acoustic nerve; and diseases of the kidneys, says Dr. Elliotson, sometimes produce inflammation in the corresponding portions of the spinal chord.

Hence, it is evident that the effects of sympathy do not, always, *appear* in the portions of the system which are mostly affected. When a voluntary muscle is made to contract, the suffering produced by sympathy, would seem to be in the nerves, peculiar to this agency, connected with the muscle, while the effects are shown in the muscle. And hence, Bichat found that sympathy of animal *contractibility* occurs only when the nerves connecting the affected muscle with the brain, or spinal chord, were entire. For, when he divided them, the convulsions in the corresponding muscle ceased, as the pupil of the eye ceases to contract when the third pair

have been divided, although light is made to glare upon the optic nerve. It should be borne in mind, however, that great uncertainty must necessarily attend deductions made from results produced by such mutilations of the living body. For, in the very nature of things, it must be next to impossible for us ever to know precisely, when the parts are injured in this manner, just how far the sufferings of one organ may extend to others, in different parts of the system.

3. PHYSICAL SYMPATHY DOES NOT DEPEND UPON CONTINUITY OF SURFACE, OR THE CONTIGUITY OF THE PARTS AFFECTED BY IT.

It is well known, that vomiting may arise from a blow on the head, disgust, sailing, pregnancy, or a stone in the kidney. The effects of the blisters, detailed in the preceding chapter, put this fact beyond all doubt. For, what connection could be traced through the scalp to the dura mater? And hence it must follow, that if the laws of sympathy, or that *susceptibility* of the system in which they have their foundation, or on which they operate, may be acted on or controlled by the touch of the human hand, we may see, at once, how it is, that the states of the system may be changed from wakefulness to sleep, and vice versa, by mere manipulation.

We are, certainly, not able to trace any nervous connection between the organs of mirth, and the muscles of the mouth concerned in the act of laughing. And yet, who doubts, but that the act of laughing is produced by sympathy with the mental organs? And so of the organs of self esteem, and sadness, or grief. These, and many others, when excited, either naturally or artificially, operate upon the muscles of the face by sympathy; and yet, we are not able to trace any nervous connection between the organs, and the portions of the face, corresponding in which these emotions are shown, when the organs are excited. In the last stages of pulmonary consumption, we see the hectic blush in a particular place in the face, thus *demonstrating* that, between the lungs and those points in the face, the vital forces have established a sympathetic connection, as if to give notice by a visible sign of the suffering condition of the lungs within. In this case there is sym-

pathy without any continuity of surface, or any direct connection by the motor and sensitive nerves. Hence we arrive at the following conclusions.

4. THAT A PORTION OF THE NERVOUS SUBSTANCE, INCLUDING, IT MAY BE, THE GANGLIONIC SYSTEM, IS DEVOTED, EXCLUSIVELY, TO SYMPATHETIC FUNCTIONS.

It would transcend my limits to enter upon an examination of the physiology of the nervous system in all its parts, I must therefore content myself with a mere statement of those conclusions which are legitimately authorised by the few anatomical examinations, and pathological observations, which seem to be directly connected with this view of the subject.

(1.) The nerves of *sensation* and *motion* cannot, in all cases, convey sympathy, because, we know that sympathy does often occur independently of sensation or motion. Nor is this all; some sympathising parts have no susceptibility at all. It may be objected that all vascular parts acquire sensibility under inflammation. But in saying this, the objector overlooks the fact, that there is no inflammation without *sympathy*. Inflammation is, in all cases, the effects of *sympathetic* laws.

These sympathetic or antipathetic influences are what Dr. M. Hall and others have denominated the "morbid and *reflex* actions of the spinal marrow." This distinguished anatomist, by a long series of experiments and observations, thinks he has proved, that these "*inflex* actions do not depend upon *sensation* or *volition*, but upon some other principle of the animal economy; the only known principle which remained, and which could be the probable agent in these actions, was the *vis nervosa*." The following are his conclusions. The term *sympathetic*, or *antipathetic action*, might be substituted for the term "*inflex*," in these conclusions, and the idea would be as well, and perhaps better expressed:

1. It is proved by the series of facts which have been observed in the human subject, that the excito-motory reflex actions are *independent of sensation and volition*, however they may be accompanied by sensation, or influenced by volition, in the perfect animal.

2. It is proved as a consequence, that the reflex actions are *dependent on another principle of the nervous system*; and it

is proved by a series of experiments, that this principle is the *vis nervosa* of Haller, acting according to a new reflex law.

3. The phenomena of the excito-motory reflex actions are obvious in cases of paralysis, in proportion as that paralysis is more complete; they are therefore, more observable in paraplegia, than in hemiplegia, in general, but in each of these according to their intensity; they are therefore not only independent of sensation and volition, but inversely as these, frequently disappearing as these return.

4. In accidents, as in experiments, the excited reflex actions are not immediately observed, but are manifested only after the lapse of certain intervals of time; it is plain, therefore, that the first influence of the shock is to diminish the excito-motory power; and this may remain until the patient falls a prey to the accident; as in the case noticed in Dr. W. Budd's paper.

5. It is observed that at a subsequent period, in more favorable cases, the excito-motory power is not only restored to its normal condition, but morbidly augmented.

6. This is especially observed in certain diseases, as tetanus, the effects of strychnine, &c.

7. The reflex arcs of the nervous system will be imperfect in cases of disease or injury of the lumbar or other regions, as in the case noticed in Dr. W. Budd's paper, and the reflex actions will consequently be absent; a fact which affords in its turn an important source of diagnosis, as to the seat of the disease.

8. In certain cerebral affections attended by coma, the presence or absence of reflex actions, in the eyelids especially, gives us an index of the degree of severity of disease.

9. Certain diseases, as hydrophobia, epilepsy, hysteria, and certain remedies, as strychnine, cantharides, &c., not only induce augmented excitability, but manifest their effects precisely upon the organs which are, physiologically, under the influence and dominion of the excito-motory power.

10. There are new forms of disease of the true spinal functions, not hitherto described, such as the dysphagia, the peculiar action of the rectum, &c. which have been briefly noticed.

11. Certain parts, as the sides of the thorax, the soles of the feet, &c., are more susceptible of the excitement in question than others.

12. Dr. W. Budd has very justly observed, that in many cases of violent reflex and even convulsive actions, there was no sense of fatigue, and little emaciation of the muscles. In fact, fatigue is a cerebral state, and cannot be expected to occur in the cases in which the reflex actions are most observ-

ed; and emaciation is most obvious in spinal paralysis, in which the reflex arcs being interrupted, the reflex actions are also precluded from taking place. Fatigue is *felt* severely after violent attacks of epilepsy and other spasmodic diseases, in which the cerebral functions are afterwards restored.—*Med. Chir. Rev. Jan. 1841.*

The reader will readily perceive, how exactly the foregoing conclusions agree with the sympathetic phenomena, peculiar to the results produced by pathetism.

Nor can I see why these laws should not satisfactorily account for the following fact, stated in Dupuytren's lectures, where he says :

“It is of almost constant occurrence, that diseases of the upper part of the thigh are felt, so to speak, at the knee; and also, that those of the upper part of the humerus are felt at the elbow.

“It is a curious circumstance, that in certain individuals after lithotomy, or other great operations, an abscess is apt to be formed in the calf of the leg. We cannot form any idea how this should be, but so it is.

“Generally, in affections of the brain, the effects of purgatives on the bowels, are much less powerful than usual; for example, five or six grains of tartar emetic, and several ounces of Epsom salts, will not often produce either vomiting or purging. In these cases, the oleagenous purgatives, such as castor or croton oil, succeed best.

“Extensive and severe burns are almost always followed by constipation.”

(2.) There is no *sensation* independently of the brain.* But sympathies may, and do exist, independently of that organ.—Various portions of the system may be made to sympathise with the influence of pathetism, when the brain is not affected at all; and we have seen, that fœtuses have been born alive without any brain. Communications of nerves exist without any connection with the brain. And if the phenomena, common to a state of sympathy, be admitted, no fact could be more clearly demonstrated, than that *sympathy* may, and does exist independently of sensation, and sometimes independently of the brain. I have seen hundreds of cases,

* Or without the medulla oblongata.

where sympathy has been manifested in the highest degrees, when at the same time, there was no evidence of *sensation* whatever.

We have also seen that disease has been cured by sympathy; that is, cures of a most extraordinary kind have been effected, which could not be traced to any other known laws.—And, the same may be said of the cause of disease. Every physician knows, not only that every part of the system may suffer from sympathy, but that diseases are sometimes caused by this agency, alone. For a few specimens of this kind, see the American Journal of Medical Science for October, 1841, in which a number of cases are stated by Dr. Zabriskie, demonstrating the existence of “*sympathetic paralyses*.” Six cases are enumerated, at length, and from them, the Dr. gives the following reasons for believing that *paralysis* was sympathetic of enteritis, when the encephalo-spinal system was not affected at all:—

“1. The inflammation always precedes the paralysis, and often for some time.

“This took place in Dr. Waddel’s case and in all the cases of Mr. Abernethy, and in all the cases observed by myself.

“2. From the absence of all morbid appearances on dissection, the nervous apparatus appearing sound.

“3. From the inability of all remedies applied to the spine, to the brain, or to the general nervous system.

“5. The remedies which gave the most relief, were those which relieved the inflammatory systems.”

Cases in support of the above conclusions might be quoted in great numbers, if it were at all necessary.

(3.) All that is known of the anatomy and functions of the ganglia, confirms the assumption as to their exclusive sympathetic functions. That communications are made from different parts of the system, without particular reference to the encephalo-spinal mass, is as certain, as that the mind takes no cognizance of the processes constantly going on in the animal economy, and there can be no room for doubt, but these imperceptible sympathetic influences are carried on by the ganglionic nerves; which may serve as so many little brains, as it were, distributed throughout the system for the reception

and transmission of sympathetic influences, the same as the encephalon, receives impressions from the nerves of sensation, and transmits, perhaps, through this medium, the motive power to the different parts of the system.

The vital functions depend much more upon the ganglionic system, than upon the brain or spinal nerves. Fœtuses have been born without any brain or spinal chord; but in these cases, the ganglions were perfectly developed. Lobstein relates the cases of six fœtuses born with absent brain, and other organs, in each of which the *ganglionic system* was perfect, and even *unusually large*.* And Dr. Cayre relates the cases of nine idiots dissected by him, in which the encephalo-spinal system was wasted or diseased, while the ganglionic was perfectly healthy. From these facts, it follows, as will more fully appear hereafter, that breathing, and, in fact, all the animal functions, have been carried on without a brain, but never, so far as is known, without the ganglionic nerves. The functions of the heart have never been performed without its ganglia, so that the cardiac ganglia, as the heart is the first organ that comes into action, is the first process towards the formation of a nervous system. But this assumption would seem to be more fully confirmed by a recent discovery made by Dr. Remak, of Berlin, who has elicited the following facts:

“The nervous substance is contained in tubes. The tubes enclosing the medullary matter of the sensitive nerves are exceedingly thin and transparent, while those surrounding the substance of the motor nerves are much more resisting and dense; to which latter condition the greater whiteness and opacity of those nerves appears to be owing. It is well known, that nervous filaments from the cerebro-spinal system go to join the ganglia of the *sympathetic* system; but according to the researches of Dr. Ramak, they only traverse the ganglia without forming, with them, any more intimate connection, as was formerly supposed. The nervous matter of the *sympathetic system* is distinguished by its peculiar reddish tint, but the nerves given off by the sympathetic ganglia, carry both reddish and white (cerebro-spinal) matter; the latter, however, exists in the least quantity in the nerves going to the organs removed from the agency of the will, as the liver, spleen, &c. But, in nearly every bundle of nervous matter, it

* London Lancet for Nov. 19, 1843.

would seem, that motor, sensitive, and *sympathetic* filaments are present. Two kinds of functions are well established to belong to the cerebro-spinal nervous system, a perception of sensation and a motive power; and Dr. Remak supposes a *double function* of a similar kind to belong to the *sympathetic system*, thus rendering necessary the existence of a double *sensorium commune*, in the same living being, one of organic or vegetative, and the other of (so called) animal life."*

Here, then, we find the FOUNDATION of those *susceptibilities*, described in a preceding chapter. The ganglia and *sympathetic nerves*, *form the union between mind and matter*. They constitute the medium through which the mind operates, both upon its own organs, and upon the mind, or organs of others; and also, by which one part of the same system, influences, sympathetically, another part. They are the connecting link between the mind and the nerves of motion and sensation, and through which the functions of all the other nerves may be controlled, or suspended, or transposed from one organ to another, in the same body, or transferred from one system to another, as in somniphathy and the phenomena common to that state.

5. TWO SEPARATE LIVING BODIES ARE SOMETIMES GOVERNED BY THE SAME SYMPATHETIC LAWS.

Many cases are on record, of two persons, having such an *identity* of life, that the health of both, and indeed, their mental exercises, have been affected in precisely the same way, even when they were not in the same place. A reputable physician of this city informs me that he is well acquainted with two twin sisters, who were affected in this way. One was always sick precisely at the same time with the other, though some twenty miles apart. One was married; and having arrived at the full period of gestation without the knowledge of the other, the single sister, was taken with slight labor pains, at the very time they commenced with the other sister. The following case was communicated to the Royal Academy of Medicine, by M. Cagentre, in 1824.

"Twin brothers were affected, precisely alike, for a number of years. Whatever indisposition one suffered, was suffered

* De Nervo Sympathetico, p. 25.

by the other at the same time. Derangement of the alimentary canal, intestinal worms, &c., always made their appearance, in both, exactly at one and the same *moment*, and the symptoms in both were of equal intensity. Dr. Nourel carefully watched them, after their return from a fifteen month's stay in the country, and verified the observations of the nurses. He found that quotidian intermittent fever commenced and terminated on the same day in both; both had acute conjunctivities together, and also colic, which lasted in each for twenty-four hours.—Two molar teeth made their appearance in each, at the same time. These things took place in 1831. In 1832 they had different eruptions, but both suffered contemporaneously. In the winter both had bronchitis together. In 1833, they were attacked with measles, and after these, with scarlet fever; in these diseases each twin had symptoms precisely similar to the other, and the commencement and termination, in both, were at precisely the same period. In 1834 they had ear ache and intermitting fever together; and also vesicular eruption on the back of the neck. But their *dispositions* were entirely opposite; one was thin and lively, the other robust and indolent."

It is an old observation, that two persons are often known to have similar affections, at the same time, or where the sympathy is said to be so strong between them, that the sickness of one necessarily *affects* the other. But in the above remarkable case, it will be seen, the affection of one was not caused by sympathy with the other, but, the same cause operated on both, precisely alike, at one and the same time, through a number of years.*

* The same sympathetic laws are supposed to govern animals. The charm of serpents has been proverbial from immemorial time. A case in illustration of this law, is given in the New York Sun, for April 6, 1843.

Some years since, a gentleman, by the name of A. W. was travelling in Mississippi, and found in the road side a rattle-snake. The road was narrow, and it is impossible to say that the snake was on the right hand. Mr. W—— dismounted, and procured a stick to kill the snake, struck it a blow, so as to disable it, and to his astonishment, heard a partridge flutter on the left hand side of the road at the instant the blow was inflicted on the snake. The partridge was eight or ten feet from the snake, and he immediately went to it and picked it up, intending to secure it first and then despatch the serpent. He recollected, however, having heard that the charm of the bird was communicable, by contact with it to any other living animal, and deposited it in the place whence he had taken it, and resumed his 'labors of love' on the 'charmer.' To his great astonishment, he observed that every blow on the snake, seemed to tell on the partridge, which fluttered at every one: and as

Facts in abundance are at command, from which it would seem, that the same laws sometimes operate upon two different minds, even when at a great distance apart. A case of this kind is given by Dr. Abercrombie, where a mother and her son, a hundred miles apart, had precisely the same dream, at the same hour of the same night. The son was the Rev. J. Wilkins, dissenting minister at Weymouth, England, and the particulars of his dream are thus stated by himself:

“One night, soon after I was in bed, I fell asleep, and dreamed I was going to London. I thought it would not be much out of my way to go through Gloucestershire, and call upon my friends there. Accordingly I set out, but remembered nothing that happened on the way, till I came to my father’s house. when I went to the front door, and tried to open it, but found it fast. I then went to the back door, which I opened, and went in; but finding all the family were in bed, I went across the rooms only, went up stairs, and entered the chamber where my father and mother were in bed. As I went that side of the bed in which my father lay, I found him asleep, or thought he was so; then I went to the other side, and just turned the foot of the bed. I found my mother awake, to whom I said these words, ‘Mother, I am going a long journey, and I am come to bid you good bye.’ Upon which she answered me in a fright, ‘O dear son, thou art dead!’ With this I awoke, and took no notice of it, more than a common dream, only it appeared to me very perfect, as some dreams will. But in a few days after, as soon as a letter could reach me, I received one by post from my father, upon the receipt of which I was a little surprised, and concluded something extraordinary must have happened, as it

the work of death progressed with the snake, it seemed to proceed *pari passu* with the bird. When the snake writhed, the bird fluttered, and when the snake was dead, the bird absolutely fell on its side, made sundry gapes and expired.

The following is from the Philadelphia Public Ledger:—A gentleman of great respectability in St. Croix, showed me a hen’s egg which has on it, in relief, the figure of a goose. The annexed is a sketch of the figure, taken in my presence, and the following is his account of the case:

The circumstances connected with this phenomenon may not be unworthy of notice. There was only one fine white goose on the place, which constantly associated with the other fowls of the yard. Having no other companion, he frequently seated himself in the yard, among the rest of the fowls, precisely in the posture of the figure in the egg, which egg was laid by one of the hens constantly in company with the goose. The feathers on the body of the goose were in rather a rough state, but the neck was covered with down and no feathers.

was but a little before I had a letter from my friends, and all were well. Upon opening it, I was more surprised still, for my father addressed me as though I was dead, desiring me, if alive, to write immediately; but if the letter should find me living, they concluded I should not live long, and gave this as the reason of their fears:—That on such a night, naming it, after they were in bed, my father asleep, and my mother awake, she heard some one try to open the front door; but finding it fast, he went to the back door, which he opened, came in, and came directly through the rooms up stairs, *and she perfectly knew it to be my step.* I came to her bedside, and spoke to her these words, ‘Mother, I am going a long journey, and am come to bid you good-bye; upon which she answered me in a fright, ‘O dear son, thou art dead!’ which were the very words and circumstances of my dream; but she heard nothing more, and saw nothing; neither did I in my dream, as it was quite dark. Upon this she awoke my father, and told him what had passed; but he endeavoured to appease her, by persuading her it was only a dream; she insisted it was no dream, for that she was as perfectly awake as ever she was, and had not the least inclination to sleep since she had been in bed. From these circumstances I am apt to think it was the very same instant when my dream happened, though the distance between us was a hundred miles; but of this I cannot speak positively. This occurred whilst I was at the academy at Ottery, Devon, in the year 1754, and at this distance of time it is still fresh upon my mind. I have since had frequent opportunities of talking over the affair with my mother, and the whole was as fresh upon her mind as it was upon mine. I have often thought that her sensations as to this matter were stronger than mine. What some may think strange, I cannot remember that any thing remarkable happened hereupon. This is only a plain simple narrative of a matter of fact.”

Almost any person, indeed, would be very apt to suspect, that a dream so very remarkable as this seemed to be, was a prognostication of something extraordinary, but the sequel proved, that nothing out of the common course of events happened to either of the parties; for Mr. Wilkins lived nearly fifty years afterwards, and died a natural death.

4. WHAT WE KNOW OF SYMPATHY AND ANTIPATHY IS RESOLVABLE INTO THE LAWS WHICH AFFECT BOTH THE BODY AND THE MIND, AND ITS INFLUENCE MAY BE EXTENDED FROM ONE PERSON TO ANOTHER.

Every Phrenologist knows, that the exercise of one organ by one person, will excite the same organ in another. Thus, for instance, combativeness will excite combativeness, mirthfulness will excite mirthfulness, and so of the other organs. This is according to a law of the human mind which explains the aptitude of minds, in society, to assume a common train of thought or feeling, grave or gay, as if by contagion.

We could not, of course, find room for any considerable portion of the facts there are at command, elucidating this part of our subject, but the following, it is believed, will be sufficient to bring it sufficiently before the mind of the reader:

“In a poor house at Harlem, under the inspection of the learned Dr. Boerhaave, a girl, under an impression of terror, fell into a convulsive disease, which returned in regular paroxysms. An interested by-stander witnessing her, was seized with a similar fit, which also recurred at intervals. On the day following, another was attacked; then a third, and a fourth; and finally, nearly the whole of the children, both girls and boys, came to be affected in the same manner.—No sooner was one seized than the paroxysms pervaded nearly all the company.”

Here were the effects of sympathy; but the remedy, perhaps, would be denominated *antipathy*.

The account proceeds:

“Every remedy was prescribed by attending physicians which their skill could suggest, but all in vain. They then applied to Dr. Boerhaave to come and examine the nature of this complaint, and to prescribe a remedy if possible. The learned doctor immediately observed that the disease was communicated from one to another by *sight*; and he inferred that it was the effect of the imagination solely, and that he must apply his means to the minds of these children, rather than to their bodies. He resolved, therefore, on the experiment of diverting their minds from those paroxysms by rendering a fit extremely hazardous. Having apprised the magistrate of his design, he ordered in presence of all the children, that several portable furnaces should be placed in different parts of the chamber, containing burning coals, and that irons, bent to a certain form, should be placed in the furnaces. He then gave these further commands:—that all medicine would be entirely useless, and the only remedy with which he was acquainted was, that the first which should be seized with a fit, whether boy or girl, must be burnt in the

arm, to the very bone, by a red-hot iron. He spoke this with uncommon dignity and gravity, and it was completely successful. The idea of burning in case of a fit, was enough to enable them to counteract the tendency of their minds to fits, or these spasmodic affections, and the complaint occurred not again." *Rees' Cyc. vol. 19, part 2, Art. Imitation.*

Most of our readers have, probably, heard, or read, of the strange occurrences which took place in Kentucky and Tennessee, some forty years ago, during what was denominated the Great Revival there. A particular account of them is given in Lorenzo Dow's *Journal*, and in the *Ed. Med. and Surg. Jour. vol. 3. p. 446*; and also by many others, which may be seen quoted in Powers' "Essay on the Influence of the Imagination over the Nervous System." The following account is from Dr. F. Robinson, of Tenn.:

"The churches in these states, at that period (1800), were small and uncomfortable, and the people from necessity assembled in the open field at extraordinary meetings. These meetings lasted from three to five days. They remained upon the spot day and night, and worshipped their Maker incessantly. The outward expression of their worship consisted chiefly in alternate crying, laughing, singing and shouting; and at the same time, performing that great variety of gesticulation, which the muscular system is capable of producing. It was under these circumstances that some found themselves unable, by voluntary efforts, to suppress the contraction of their muscles; and to their own astonishment, and the diversion of many of the spectators, they continued to act from necessity, the curious character which they had commenced from choice. The disease no sooner appeared, than it spread with rapidity through the medium of imitation. Thus it was not uncommon, for an affected person to communicate it to a greater part of a crowd, who from curiosity or other motives, had collected around him. It attacks both sexes, and every constitution; but evidently, more readily those who are enthusiasts in religion. The contractions are sudden and violent, such as are denominated convulsive; being sometimes so powerful, when in the muscles of the back, that the patient is thrown on the ground, where for some time, his motions more resemble those of a live fish, when thrown on land, than any thing else to which I can compare them. During the intermission, a paroxysm is often excited at the sight of a person affected, but more frequently by the common salute of shaking hands. The sensations of the patient in a paroxysm are generally agreeable, which the enthusiastic class often en-

deavor to express by laughing, shouting, dancing, &c. Fatigue is almost always complained of after violent paroxysms; and sometimes a general soreness is experienced. It has not proved mortal in a single instance within my knowledge, but becomes lighter by degrees, and finally disappears." The author adds by a subjoined note,—“some who took the disease in 1803, have not yet (1805) entirely got rid of it; but these instances of its long continuance, are very few.”

These convulsions were commonly called “the jerks.”—Another writer (McNeman), quoted by Mr. Powers, gives the following account of them:

“At first appearance, these meetings exhibited nothing to the spectator, but a scene of confusion, that could scarcely be put into human language. They were generally opened with a sermon; near the close of which, there would be an unusual outcry; some bursting forth into loud ejaculations of prayer or thanksgiving for the truth; others flying to their careless friends, with tears of compassion, beseeching them to turn to the Lord. Some, struck with terror, and hastening through the crowd to make their escape, or pulling away their relations;—others trembling, weeping, and crying out for the Lord Jesus to have mercy upon them, fainting and swooning away, till every appearance of life was gone, and the extremities of the body assumed the coldness of a dead corpse. Others surrounding them with melodious songs, or fervent prayers for their happy resurrection in the love of Christ.

“*The rolling exercise* consisted in being cast down in a violent manner, doubled with the head and feet together, and rolled over and over like a wheel, or stretched in a prostrate manner turned swiftly over like a dog. They were sometimes driven in this manner through the mud, and were sullied from head to foot. Nothing in nature could better represent the *jerks*, than for one to goad another alternately on every side with a piece of red hot iron. The exercise commonly began in the head, which would fly backward and forward, and from side to side, with a quick jolt, which the person would naturally labor to suppress, but in vain. He must necessarily go as he was stimulated, whether with a violent dash on the ground, and bounce from place to place like a foot-ball, or hop round, with head, limbs and trunk twitching and jolting in every direction, as if they must inevitably fly asunder. Sometimes the head would be twitched right and left, to a half round, with such velocity, that not a feature could be discovered, but the face appear as much behind as before. Head-dresses were of little account among the female jerkers. Even handkerchiefs bound tight round the

head, would be flirled off almost with the first twitch, and the hair put into the utmost confusion; this was a great inconvenience, to redress which, the generality were shorn, though directly contrary to their confession of faith. The *barks* consisted in being compelled to imitate the canine animal; and persons thus affected moved about on all fours, growling and snapping the teeth, and barking in so personating a manner, as to set the eyes and the ears of the spectator at variance. These persons, however, were the most gifted in prophecies, in trances, dreams, visions, fragrant smells, and delightful singing in the breast. Some were favored with an interview with their departed friends, and learned their different allotments in the invisible world; some saw the holy city, and heard the songs of the angelic hosts, others, in their visions were employed in crossing rivers, climbing mountains, finding treasures, fighting serpents, or more delightfully employed in eating the fruits of the tree of life, bathing in clear water, casting off old garments and putting on new."

The following account of these singular occurrences is from Dow's Journal, before referred to. In the year 1805, he preached in Knoxville, Tenn. before the governor, when about one hundred and fifty persons, (among whom were a number of Quakers) had the jerks. He adds:

"I have seen all denominations of religion exercised by the jerks, gentleman and lady, black and white, young and old, without exception. I passed a meeting house, where I observed the undergrowth had been cut away for a camp meeting, and from fifty to a hundred saplings were left, breast-high, on purpose for the people who were jerked to hold by. I observed where they had held on, they had kicked up the earth as a horse stamping flies. A Presbyterian minister told me, while he was preaching the day before, some had the jerks. I believe it does not affect those naturalists, who wish to try to get it to philosophise upon it;—and rarely those who are the most pious; but the luke-warm, lazy professor, is subject to it. The wicked fear it, and are subject to it, but the persecutors are more subject to it than any; and they sometimes have cursed and swore, and damned it while jerking."

Mr. Powers details the particulars of a family in Chelmsford, Mass. where one of the children was affected with chorea, and five others exercised themselves with imitating his odd gestures until every one of them were irresistibly affected in the same way. And the spell was not broken until the father one day, brought a block and axe, and sternly threatened to

take off the head of the first child who should exhibit any more of those singular gestures.

Dr. Haygarth gives a similar account of the effects of sympathy, which took place in 1796 among some peasants in the Island of Anglesey. It commenced with one female, and in a short time extended to some twenty others. And a similar account may be found in the *Edinburgh Medical and Surgical Journal*, vol. 3, p. 438, given by the Rev. Mr. Archibald, of Unst. He says, at first, the affection commenced with a female; but, on her manifesting the affection at church, it was immediately communicated to others. And, in another parish, some sixty persons were seized in the same way; and being carried out and laid in the yard, they would struggle and roar with all their might, for five or ten minutes, and then rise up, without remembering any thing that had happened to them.

Affections of the same kind prevailed among the Anabaptists in Germany, and the French Prophets in Dauphiny, and in England; and after them the Quakers, and also among the Puritans of New England, in 1745, and more recently among the Methodists, Baptists, Presbyterians; and especially, among the Mormons. Nor are these affections confined to Protestant sects; they have been equally prevalent among the Papists, and, indeed, among those, as we have before seen, who are not religiously disposed. I have been informed of similar affections among the Mahometans. A gentleman who has been among them during seasons of prayer, states, that for some time, he had seen some of them convulsed, and they would emit a kind of froth at their mouth.—Those less favored, would take this foam from the mouths of their companions, and by rubbing it upon their own bodies would thus excite a similar state of feeling and action in themselves.

That the affections above described, were communicated by the laws of sympathy, there can be no doubt. And it would be equally easy to show, that many diseases deemed contagious, have been communicated in the same way. The history of the Asiatic Cholera, would as plainly demon-

strate the truth of this position, as it would prove, that any such disease ever existed. And the same might be said of other diseases, and affections, both mental and physical, which are frequently known to gain upon individuals, families, neighborhoods, and generally whole districts of country. Sometimes, an enormous crime will be committed; and its flagrancy excites a kind of susceptibility in the mind of another, and another, until it has been followed by a dozen or more of the same kind.

The same sympathetic panic often seizes upon large assemblies of people. A word or a hint from one individual communicates a shock through the whole. In this way mobs are frequently stimulated to ungovernable fury, and soldiers, in the day of battle, rush on in the face of death; or panic struck, the fear spreads from one to thousands, and those who but a moment before, were ready to brave the cannon's mouth, are now trembling with fear, and find it impossible to summon either courage or self-possession. At other times, a word, or look from some master spirit, electrifies the mass around him, and from one to another the impulse communicates a feeling of heroism and intrepidity, which increases as it spreads, till the entire mass are impatient to throw their lives away in the whirlwind of their ambition.

If one person is said to see a ghost, it not unfrequently happens that a sensibility is awakened in the minds of many others, till the infection has spread, and ghosts are multiplied in proportion to the susceptibility of the people, who happen to hear the strange details of the departed spirits. So, if one in a family, or neighborhood, happens to have a singular dream, it is followed with others of the same kind. In a word, whatever is related to the strange or marvellous, whatever is calculated to excite *credulity* or *fear*, operates by *sympathy*, and in this way we may easily account for the prevalence of many crimes, and the various forms of witchcraft and delusion which have, from time to time, so much disturbed and cursed the world.

I know, indeed, that many pious people, attribute some of the exercises I have described to the powerful influence of the Holy Spirit. That many persons affected in these ways, are

pious, sincere christians, there can be no doubt. But a knowledge of the susceptibility of which I have spoken, and the nature of the human mind, would leave us little doubt, that these things may be rationally accounted for in some other way.

I have seen persons "lose their strength," as it is called, at camp meetings, and other places of great religious excitement; not pious people alone, but those also, who were not professors of religion. In the spring of 1824, while performing pastoral labor, in Dennis, Mass., I saw more than twenty men affected in this way. Two young men of the name of Crowel came one day to a prayer meeting. They were quite indifferent. I conversed with them freely, but they showed no signs of penitence. From the meeting they went to their (shoemaker's) shop to finish some work, before going to the meeting in the evening. On seating themselves, they were both struck perfectly stiff, as if paralyzed by catalepsy.—I was immediately sent for, and found them sitting, paralyzed, on their benches, with their work in their hands, unable to sit up, or to move at all! And I have seen scores of persons affected in the same way.

I have, by pathetism, thrown numbers of persons into a state precisely similar to that, in which they are said to "lose their strength" under religious excitement. They, themselves, declare, that the two states are exactly alike, nor is there any reason for supposing that there is any material difference between them.

CHAPTER V.

RELATION.

We have seen that sympathy and antipathy, in the human system, depends upon the *Relation* subsisting between two organs. That is, there can be no sympathy, without two persons, things or parts; and between which there must be some *connection* established. If the brain is affected by the stomach, or vice versa, it is because they sustain a peculiar *relation* to each other, and so of every effect which comes to pass, throughout universal nature. Two things must not only exist, before the third is produced, but there must be a *relation* brought about between them; for, without this, there can be no cause, no effect of any kind. Some results may require more than two things to be combined, but it is a fact so well known, that no effect of any kind, can be produced without a *relation* first established between an agent and a substance to be acted upon, that we need not stop here, to argue this point. It is one of those self-evident truths, which every where first meets the opening senses of the human mind, and therefore is no more susceptible of proof than one's own *consciousness* of thinking, speaking, or acting. It will be sufficient, therefore, if I merely, in this connection, add, what may be necessary to show how this first law of nature applies to the subject now under consideration.

1. If you take two pieces of soft, smooth iron, and apply them together, you will discover no attraction between them. But if you rub one upon the other, lengthwise, in one direction, only for a few minutes, you will perceive a mutual attraction between them. Now, we say, this attraction depends on the *relation* established between those two pieces of iron, by bringing them in contact, in that peculiar manner.—

• For if you merely rub one upon the other, as in the process of

filings, no effects of this kind, are produced. So, if you take an ordinary iron rod, and hold it horizontally, on applying the needle it will not show any signs of polarity; but hold the rod perpendicularly to the earth, and it acquires polarity, so as to affect the needle. The reason to be assigned for this, is, that in the one case, the rod sustains a relation to the earth from which its polarity is derived, which it does not sustain in the other.

Zinc and copper, produce no galvanic effect, till a relation is established between them by a suitable fluid.

So we say of light and heat. No effects are produced by the sun until his influence is extended to the earth, and a certain relation must be brought about between the earth and the sun, before the process of vegetation is commenced; and not then, even, unless the sun is brought in contact with earth of a certain *quality*.

All chemical results come to pass, from relations established between two or more substances; and the effects depend always, upon the *qualities* of the bodies which are brought together.

2. *This relation between two bodies, which produces any positive results, depends upon certain contrarieties in their qualities.* This law is universal. True, when you bring two poles of the same denomination in contact, a result is produced, but it is of a *negative* character: they mutually repel or destroy each other. But, to bring about a positive result, to change the state of one substance or body, it must be brought into relation with another of an opposite quality.—We have already observed, that nature works by *contrarieties*. Throughout the animal kingdom, we see the species produced by the union of male and female, and husbands and wives of the same temperament usually, *ceteris paribus*, will either have no issue, or their children, should they have any, will be found feeble and short lived. And the law of God, forbidding the marriage of near relations, is hence seen to be founded upon a law of our nature; and thus we may see why it is, that the offspring of such marriages are followed by cretinism, or feeble mental endowments. Mr. Marchant, a physi-

cian and a native of the Pyrenees, says,* that the inhabitants of a village in the region of the narrow valleys seldom marry with others out of the neighborhood, and that the consequences of this custom are so powerful, that mental imbecility is quite common, even in the most noble and wealthy families.

As in the animal, so we find a correspondence in vegetable life. The seed, for instance, in the pod, is produced on the line which unites two leaves, and the same law governs throughout the vegetable kingdom.

All the changes produced in the human system by medicine, all the changes produced in any substance, in any way, are brought about by establishing a relation between the thing acted upon, and the other body brought into relation with it. Changes are brought about in the mind by the same means.—All our duties to God, and our fellow men, grow out of the *relations* we sustain to him and them. All our feelings of love or compassion, or hatred, spring from these relations. And so of hope and fear, so of faith, and every emotion of which the mind is susceptible, the whole depend on the qualities of other persons, and things, between whom and ourselves certain relations have been established. And hence we find, that in order to produce any change in the human system by pathetism, it is always necessary to establish a *relation* between the *operator*, the *process*, or the *agent*, and the *patient* to be acted upon. Nothing is done until this relation has been formed, and upon its strength, if I may so speak, will depend all the results which follow the process of pathetising the human system, or any mental effort exerted over the system of another.

3. *This relation is increased by habit, and sometimes acquires supreme control over the mind.* This fact explains how it is, that some persons are made sick by the mere thought of an emetic. The mind having become accustomed to the effects produced by this drug, the mere sight or *thought* of it, calls up this relation, and the sickness follows. So, when the mind becomes habituated to the effects of any other medicine

* Gazette Des Hopiteaux.

or any peculiar *process* for the production of certain results; it is often effected by this relation in the same way.

Instance the condition of one confirmed in habits of intoxication. While the rum-bottle is out of sight, he remains quiet and sober; but on merely seeing the vessel from which he has so often quaffed the bewitching liquid, his susceptibility is awakened at once, and his desire for it again becomes ungovernable, till he is carried, it may be against his will, into the vortex of destruction.

What is called the "association of ideas," is attributable to this same power. The sight of one object calls up another, with which it had become associated.

The first note of a well-known tune, brings to mind the entire piece of music. Cases of severe tooth-ache, have often been cured by the mere sight of the forceps. Persons injured by fright, in cases of fire, or great danger, are sometimes alarmed, on hearing similar sounds, or merely seeing any place or object which brings the scene again before the mind. Some will sink into a state of sleep, by merely sitting in the chair where they have been often put to sleep before; and the sight of any place, where the mind has been peculiarly impressed, revives the same feelings, and we live over again the scenes which, otherwise, had remained entirely obliterated from recollection.

4. *This relation, in some cases, seems to depend, wholly, upon the mental apprehensions of its nature, and the mind transfers it from one object to another.*—That the mind has this power, is proved by innumerable facts of the same kind of those we have already adduced, in the chapter on susceptibility. How else did it come to pass, that the opiate given by Dr. Gregory, operated according to what the patient *thought* it was, and not according to its real nature? How else, did it come to pass, that Sir W. Ellis' patient was salivated with bread pills? Indeed, almost every practitioner of any considerable experience, will be found able to refer to cases of the same kind, when the effects of medicine have been just in proportion to the *apprehensions* of the patient, and not according to their well-known medical properties.

What made the criminal die, when he *thought* himself bleeding to death, and not a drop of blood had been drawn from his veins? Why, evidently, he had transferred, in his mind, to himself, the *real* danger, from *actual* bleeding; and the consequence was, he did just as he would, had his eyes been open, and he had seen the blood issuing from his own arm. Many persons have, unquestionably, died in this way. The New Zealanders die under the same power, when cursed by the *Arcekee*. The mind, once fully impressed with a conviction of the UNERRING CERTAINTY of death, the susceptibility yields beyond the power of recovery, and death follows as a matter of course. Some years ago, a lady in this city went to "Old Bones," as he was called, to have her fortune told. He told her she would be a corpse before three o'clock the next day, and, if she would only go home and look into the cistern, she would there see her own coffin. The result verified the prediction. On looking into the cistern, with her susceptibility excited beyond her control, as of course it would be under such circumstances, she saw her coffin, and at the appointed hour, laid down and died. And persons may be found in all classes of society, who might be killed in the same way, indeed, as they no doubt have been, in times past. And the history of witchcraft, would afford some of the most striking illustrations of this law of the human mind, and most clearly show *how* it is, that the susceptibility becomes affected by the mental *apprehensions* of danger, or infection from some *unseen* or *supernatural* power.

Many of the results, which followed the trials made to test the reality of Mesmer's assumptions with regard to the "universal fluid," have often been referred to for the purpose of proving that the whole was a delusion. However, we shall find, upon examination, that those results prove the truth of pathetism, and demonstrate the reality of the law here laid down. Let us notice a few of them, as stated in the language of the opposition.

The report of the Royal Academy of Sciences, of which Dr. Franklin was one, is well known. To understand the accounts given by this committee, of what they saw, it must be

borne in mind, that Mesmer was in the habit of operating by the means of ropes, trees, glass bottles, &c; and while we allow, that he was both ignorant and avaricious, it is but justice to add, also, that the report of the commissioners does not seem to evince so much candor, on their part, as we should judge necessary for the purposes of a true and impartial verdict on the subject of their investigations. But, to show that all the effects were produced without the agency which was assumed by Mesmer and his disciples, the following cases are given:—

“A female servant submitted to the same operation; and she affirmed that she felt a heat in every part where the magnetised finger was pointed at her; that she experienced a pain in her head, and during a continuance of the operation, she became faint and swooned. When she had fully recovered, they ordered her eyes bandaged, and the operator was removed at a distance, when they made her *believe* she was still under the operation, and the effects were the same, although no one operated, either near her, or at a distance. She could tell the very place wherein she was magnetised; she felt the same heat particularly about the back and loins, and the same pain in her eyes and ears. At the end of one quarter of an hour, a sign was made for her to be magnetised, but she felt nothing. On the following day, a man and a woman were magnetised in a similar manner, and the result was the same. It was found that to direct the imagination to those parts where the sensations were to be felt, was all that was necessary to produce these wonderful effects.

“Mesmer and Delson, asserted that they could magnetise a tree, and every person approaching the tree in a given time would be magnetized, and either fall in a swoon, or in convulsions, provided the Magnetizer was permitted to stand at a distance and direct his look and cane towards the tree. Accordingly an apricot tree was selected in Dr. Franklin’s garden at Passy, for the experiment; and M. Delson came and magnetised the tree while the patient was retained in the house. The patient was then brought out with a bandage over his eyes and successively led to four trees, which were not magnetised, and was directed to embrace each tree two minutes, while M. Delson at a distance, stood pointing his cane to the tree actually magnetised. At the first tree, which stood about twenty-seven feet from the magnetised tree, the patient sweat profusely, coughed, expectorated, and said he felt a pain in his head. At the second tree, now thirty feet

from the magnetised tree, he found himself giddy, attended with headache as before. At the third tree, his giddiness and headache were much increased, and he said he believed he was approaching the magnetised tree, although he was still twenty-eight feet from it. At length, when brought to the fourth tree, *not magnetised*, and at the distance of twenty-four feet from that which was, the young man fell down in a state of perfect insensibility; his limbs became rigid, and he was carried to a grass-plot, where M. Delson went to his assistance and recovered him; and yet in no instance, had he approached within a less distance than twenty-four feet of the magnetised tree.

“A similar experiment was soon after made on two poor females at Dr. Franklin’s house. These women were separated: three of the commissioners with one of them in one chamber; and two of them with the other, in an adjoining chamber. The first had a bandage over her eyes, and was then made to believe that M. Delson had commenced magnetising her, although he never entered the room. In three minutes the woman began to shiver; she felt, in succession, a pain in her head, and in her arms, and a pricking in her hands; she became stiff, her hands stuck together, got up and stamped, etc. but nothing had been done to her. The woman in the adjoining chamber was requested to take her seat by the door which was shut, with her sight at liberty, and was then made to believe that M. Delson would magnetise the door on the opposite side, while the commissioners would wait to witness the result. She had scarcely been seated a minute before she began to shiver, her breathing soon became hurried; she stretched out her arms behind her back, writhing them strongly, and bending her body forwards; a general tremor of the whole body came on; the chattering of her teeth was so loud as to be heard out of the room; and she bit her hand so as to leave the marks of her teeth in it; but M. Delson was not near the door, nor in either chamber; nor was either of the women touched, not even their pulse examined.

“Dr. Sigault, an eminent physician of Paris, communicated to the commissioners some effects he witnessed upon his mere pretence of his being an adept in the art of Mesmer. Being at a great house one day, he caused it to be announced that he could magnetise. The voice and serious air he assumed, had a sensible effect on a lady present, although she endeavored to conceal the fact. But having carried his hand to the region of the heart, he found it palpitating. She soon experienced difficulty in respiration; the muscles of her face were affected with convulsive twitches, her eyes rolled; she shortly

fell down in a fainting fit; vomited her dinner, purged several times, and experienced incredible weakness and languor. He further adds, that having met a celebrated artist one day on the Pont-Royal, and being informed by him that he had been afflicted several days with a severe head-ache, the Doctor persuaded him that he was instructed in the mysteries of Mesmer, and by means of a few gestures, he almost immediately removed the pain, to the astonishment of the artist."

Now, on examination, it will be found, I think, that these accounts, so far from proving any thing against pathetism, prove exactly the reverse. Observe:

1. The persons affected in the manner above described, had all *heard*, more or less, of the effects said to be produced by mesmeric operations. In this way their susceptibilities were *excited*, of course, and prepared to be controlled by the *apprehensions* of the mind.

2. The *relation* established in their minds between themselves, and the *agencies* by which they were *supposed* to be produced, brought about the results above described. Just so, if a hungry person *fancies* he sees an article of food: the saliva is at once excited, and his "mouth waters," from the association in his mind. But, on inspection, what he *thought* to be a mellow peach, perhaps, proves to be a painted piece of stone!

I knew a lady who was seized with vomiting, on the arrival of the morning which she had appointed for going on board a packet, for a few hours' sail. Long before she entered on board, she was completely prostrated with "sea sickness." Persons are often exceedingly frightened in the same way. They think they see a ghost, which proves, however, to be a lamp post. But these cases, so far from demonstrating the mere ideality of the agency by which we operate on the human system, in producing relief from pain, or inducing sleep, by a mere *process*, adopted for this purpose, they go rather to prove the reverse, and to show *how* it is, that the mind creates or transfers this relation from one object to another, and appropriates to itself all the influences which could, in any case, be exerted by contact with physical causes.

Others have fancied philosophy and science not a little in-

debted to themselves, when they have pointed to cases similar to the above, and assumed that the effects were produced by the *imagination*. But what the "imagination" is, they have not told us.

The knowledge of this law of the human mind sufficiently explains how it is, that sleep follows from certain processes, without contact with the patient; and, I humbly conceive, it shows the *rationale* of this mystery much more satisfactorily than the theory of Mr. Baird, of Manchester, England, which was published a year or two since, and was as follows:

"The artificial mode of effecting sleep is to *fatigue the rectus and levator muscle of the eye*, which is effected by a continuously strained and intent gaze at an object viewed under an acute angle. Under such circumstances, the irritability of those muscles becomes exhausted, as well as the irritability of the optic nerve; a mist rises up before the eye, and sleep ensues."

But this amounts to no more than what almost every person may have observed and felt, when the attention has become fixed under certain circumstances. Any barber would have given as clear an account of cases of somnolency produced under the operation of shaving.

However, "physiology and anatomy" do not furnish us with sufficient proof for demonstrating this theory, as has been supposed. An article may be found in the 18th vol. of the Dublin Med. Journal, p. 70, from Mr. G. Stokes, clearly demonstrating that the closure of the eyelids is not a mere passive condition from fatigue, and relaxation of the levator, as taught by Bichat, but that *muscular agency* is employed in its accomplishment. An interesting case is there given of paralysis of the *portio dura*, occasioning lagophthalmos, in which, as in similar cases, by no means very uncommon, the upper eyelid assumes that position in which the force of gravity, unaided by muscular effort, would place it. Mr. Stokes considers this muscle as a true sphincter, for the reasons that it presents all the anatomical and physiological characteristics peculiar to such muscles, viz. a mixed function—the voluntary power being employed during a state of wakefulness, and the involuntary during sleep. And, further, it does not appear

that this kind of sleep is induced merely by fatiguing the eyelids. Ordinary sleep may be brought on by fatigue, or a dose of laudanum; but in such cases it differs, widely, from that sleep which is induced by sympathy with any peculiar process, adopted for its production. Somnipathy may be induced without contact, or the passes, whenever a positive relation is established between the susceptibility of the patient, and the *process* used to produce it. Nor is this all. According to this theory, if the patient were to be seated with his eyes closed, sleep would not follow, because, in that case, the muscles of the eye would not become fatigued. It is well known, that *menotomy*, or whatever tends to fix the attention, has a tendency to induce sleep; and in persons of the right susceptibility, somnipathy may be brought on in this way, or, indeed, *any other change produced in the system*, which the patient is led to *anticipate*, under the direction of the operator.

CHAPTER VI.

PATHETISM.

From the foregoing pages it will have been seen, that by what I denominate *pathetism*, is meant *susceptibility* to the influence of an agency which is concerned in every feeling or emotion, or passion, or action which was ever felt, or put forth by any human being. It has to do with the laws of animal life—with nervous *susceptibility* to pleasure or to pain. Without it man is a lifeless body of matter. All the feelings therefore which one human being may be able to excite in the mind of another, whether pleasureable or otherwise, all the influence he is enabled to exert over mind, are identical with this same agency. If they be from the materia medica, received into the stomach, or agencies applied to the surface of the body, their effects depend upon a *susceptibility*, peculiar to the living body. Or, if impressions be made upon the sensorium through the eye or ear, or through the nerves of sensation, the immediate agency which carries those impressions to the mind is *pathetism*. It is heard in the tones of the voice, it is seen in the look of the eye, and the features of the face; and in its effects thus produced, nothing is thought of it, because these are common and always before the mind. But when precisely the same thing, is felt from the touch of the human hand, those not familiar with the true philosophy of mind start back and tell us this cannot be? But why not? What has been known, or what is now known of the human system, which proves that the same influence may not be communicated to one, from the touch of the hand, which at other times reaches the soul through the eye, or the ear? Or, who has been able to tell *how* it is that an impression is made upon the *mind* through the *ear*? What is there in sound to affect *mind*? Or, when the rays of light strike upon the optic

nerves, what makes the intellect take cognizance of the image which they make there? In a word, *how* is it that what we call *mind* is impressed by natural agencies, in any way? Can matter control spirit?

And pressing these inquiries thus far, I might ask an objector to tell the difference between matter and spirit—What is an *element*? What are the laws by which mind and matter reciprocally affect each other? What is *life*? What is disease and death?

Do you say that we know nothing of these first principles? that we are in the dark as to the laws which operate in producing the most common occurrences of life? Then it must not, it will not be denied, but that there are other things as mysterious and unaccountable, as the wonders of phrenopathy or clairvoyance. When I place my hand upon the head of another, and he manifests a feeling of sadness or joy; when by the same simple process, I cause him to weep or to sing, laugh or to pray, to rave with madness or to soar in ecstasies of pleasurable emotions, is there any more real mystery in the agency by which these things are done, than when one is made to weep by merely looking upon a scene of suffering; or when he is induced to sing from the influence of certain *sounds* which break upon the ear?

And thus of mental perceptions, when the external senses are closed. It is not uncommon for persons to have more vivid and impressive views of objects in their natural sleep, than they ever had in their waking state. The system being composed and all the faculties at rest, except the one or two whose excitement constitutes the dreaming, the energies of the whole seem to be concentrated upon those organs, and an impression is thus made more powerful than any which could be produced when all the organs are in a state of general wakefulness. The phenomenon of dreaming is common, and therefore excites no surprise. But when one is put into a state of sleep by artificial means, and in that state he is found to see with his eyes fast closed, and to have perceptions of distant objects, the phenomenon is new, and we cannot admit it.

If we take two pieces of smooth soft iron, and put them in

contact, we do not see that one has any influence upon the other; but if we rub one piece upon the other, in one direction only, for a length of time, we perceive that by this process, we have established such a *relation* between the two, that they mutually attract each other. And yet we cannot detect any substance in either of them which was not there before; nor do we see that a fluid of any kind is actually *communicated* by one and *received* by the other. All we know about this phenomenon is, that by a certain process, a *relation* has been established between those two pieces of iron, which causes them to stick together in this manner. What that relation is we do not know. It would seem, however, that this process had actually produced a difference in the *qualities* of iron; for before they were passed upon each other in the way I have stated, they were precisely alike in *quality*; for on applying either of them to either pole of an ordinary magnet, they affected it exactly alike. But, not so, after they have been rubbed together, as above; for, after this process, one of them will be found to possess north polarity, and the other south; thus proving that though they were precisely alike in quality, before, yet, this process has changed the quality of both, and rendered them *susceptible* of attraction or repulsion. But who, on seeing this simple phenomenon, would set it down as humbuggery; and yet, is there not precisely as much of *mystery* and the marvellous in all this, as in any of the alleged effects produced by pathetism?

Every one knows, that the health of a well person is endangered, more or less, by coming often in contact with another who is diseased. But by what law is disease communicated in such cases? Children who sleep with the aged and infirm, are known to become enfeebled, and sometimes even to assume the decrepid appearance of old age. When the little one is hurt, by accident, the mother instinctively passes her hand over the place, as if it were an impulse of nature which prompted the removal of pain by this simple process. And you will see similar promptings of sympathy, even among animals, when their young or their species give signs of pain or suffering, so easy it is to trace this same law through the

various grades of animal existence. Yet in all these things we see one of the laws of this same *agency* and *susceptibility*; and we may understand how mistaken the views of those persons are, who look upon the subjects discussed in the pages of this work, as exclusively connected with the marvellous, and confined to those who deal in jugglery, or fortune telling, or the mysteries of the "black art."

We see, moreover, how it is, that our labours present their claims upon the benevolence of the philanthropist, and the faith of the christian; inasmuch as the grand object is the illustration of those causes which induce the most frightful forms of disease and suffering which human beings are doomed to endure. What disease is to be more dreaded than *insanity*? What affliction more terrible than that which deranges the mental functions, and unhinges the human mind? What more appalling than a disease which makes shipwreck of the intellect, and converts the reason into the ravings of madness? What calamity like that which changes the dearest, tenderest ties of the kindest heart, into the bitterness of gall, and the furious paroxysms of hatred? What malady so frightful, so pregnant with woes, so difficult to manage, so painful to friends, and so fearful in its tendencies? Before the blight of this dreadful affliction, the fairest, tenderest flowers are swept away, as by the blast of the tornado. The loftiest minds, the stars and suns of our intellectual heavens, are blotted out; neither age nor sex, nor profession, are spared. Even the consolations of our holy religion, do not afford perfect security; the devoted christian, and the man of God, at the altar, are alike liable, and as often fall beneath this fatal scourge.

Alas! when, oh! when will professed christians see and know as they should do, that upon these laws, depend those states of the mind, which render obedience to the Divine Being, and religious enjoyment, even possible? that the laws of mind, those laws by which mind is developed and made to understand its various relations, are as really the laws of God's appointing, as any contained in the sacred pages? and that the violation of these laws unfits us for the Divine will as really as the commission of any other crime?

We have, thus far, considered the mind only in its manifestations through the physical organs; and this view of it will be continued in speaking of the effects produced by pathetism; so that I must always be understood as having reference to the entire person compounded of mind and matter, and which, as we have seen, reciprocally act upon each other.

It must be remembered also, that the effects I speak of in this chapter are produced on subjects both *in the waking and sleeping state*; though, in an infinite variety of degrees, in different persons, and also by processes entirely different in producing the same effects. Let us consider a few of them in detail.

1. *The five senses.*

(1.) Touch and feeling. This sense seems to be the first, and most perfectly developed, and hence, it is the first usually affected by this process. Passing the hand quietly down the arm, and inside the hand of the patient, produces numbness, or a sensation similar to that felt when the limb is said to be *asleep*; and when particular portions of the brain are operated upon, or the common mode of pathetising is continued long enough, the sensation of feeling is completely annihilated, though, in such cases, sense would seem to be *transferred* and not destroyed. For, it not unfrequently happens, that while the patient has no sensation of pain from any violence done to his own system, yet his sense of feeling in other respects, is increased when asleep, a hundred fold. He becomes, perhaps, exceedingly affected, on being touched by a stranger, or one who is disagreeable to him, or by any metallic or mineral substance.

Some persons, in a state of somniphathy, are agreeably affected by the touch of an ordinary magnet, others are disagreeably affected by it, and others, still, are not sensible of any effect when touched by it, at all. Somniphathists not unfrequently manifest a most singular sympathy of feeling with the operator; so that, while they are not conscious of any violence inflicted on their own persons, they show the keenest sense of feeling on the infliction of any pain upon the pathetiser, and sometimes, also, when the pain is inflicted on any one who is

in contact with either of them. In such cases it would seem, that the skin performs all its ordinary functions, except that the nerves of sensation do not convey impressions to the brain.

But where are the nerves of sense all this while? What becomes of their functions? And if the *influence* by which this result is produced, be, correctly speaking, "a *nervous fluid*," or an agency *peculiar* to the *nerves* of motion, and by which these organs perform their functions, how comes it to pass, that the patient, when brought under its influence, is at once, deprived of this important function of the nervous system?—It may be said, that this agency must be conveyed, and its influence received by the ordinary nerves, because, it takes away their functions. But, this inference cannot, necessarily, follow, because we know, that this result is seen only in *particular cases*. And, besides, if in the process of pathetising, a *nervous fluid* is actually communicated from the operator to the patient, the inference would be reasonable, that the power of the nerves of sensation and motion, in the patient, would be greatly *increased*. The increase of the power by which the nerves perform this office, should, certainly, increase the susceptibility, and make the patient more sensible to the infliction of pain, and, indeed, it should heighten, in every way, the nervous powers of the system. We find, however, upon examination, that, generally, the results are directly the reverse of this; for, instead of the patient's becoming more refined in his sense from touch or violence, he is wholly insensible; and on the other hand, substances which produced no sensation from mere contact in the waking state, produce the strongest impressions when the patient is asleep; and from mere contact with the hand of some somnopathists, as well as others of a peculiar temperament, when wide awake, they have a sense of different substances, and are able by this process, alone, without the sense of sight or hearing, to tell their qualities, and the feelings which others seem to entertain towards them. Medicines held in the hand of such persons, produce slight effects upon the stomach; and they will, frequently, be found able to distinguish different persons by touching them, and not only so, but to distinguish between different articles, placed

before them, while their eyes are closed, and they will distribute each one to its rightful owner. I have had a patient who, when asleep, and half a dozen articles were thrown into his lap, as handkerchiefs, penknives, pencils, pieces of money, finger-rings, &c., with his eyes fast closed, would select them one by one, and not only hand each to its owner, but he would put the articles into the same hand from which they had come to him. So that, if one held out the left hand to receive a handkerchief which he had deposited with his right, the patient, after touching it, would perceive it, and keep back the article until he found the right hand.

Mr. Cornwall, a recent graduate of the Wesleyan University, Middletown, Ct., gives an account of two cases, in which this sense was developed, so as to distinguish colors in a most remarkable degree. His subjects were two sisters, aged seven and twelve years. They discovered the color of any article handed them, merely by the sense of feeling. The youngest would put the article in contact with her lips before fully deciding. They told the color of things equally well in the dark as in the light, with their eyes blind-folded, and without his knowledge of the articles. Once, when they were both asleep together, he presented to the eldest a piece of calico, with a white ground, and minute diamond shaped figures upon it, and asked her for the color, she replied, "it is white, but there are little things in it, I don't know what." The calico was then handed to her sister, and she was asked what shape the "little things" were? After feeling it, she answered, "I guess they are diamond shaped." When different articles of different colors were presented, they invariably designated the several colors of each.

And, at the present time, I have a subject who is able to read words, and distinguish articles, apparently from this sense alone. It is well known to what an astonishing degree of acuteness the sense of touch has often been cultivated by the blind; and the case of a mute in the Hartford Asylum, (Ct.) is, perhaps, one of the most remarkable of this kind upon record. She finds little or no difficulty in designating persons by this sense, and she will even select her own cloth-

ing, at any time, from any number of other articles, even if made of precisely the same materials. She performs various kinds of needle work, and threads her needle in her mouth, a most singular performance to be sure, but that she does it, I know, from actual observation.

But it will be noticed, that between the cases of the blind and the sense of feeling in somnipathists, there is this marked difference—the former have the sense of pain, from contact or touch, in the latter it does not seem to exist, except by sympathy with another; or when a particular organ in the brain is excited, for this purpose.

There is a point between the organs of firmness and veneration, which I have called the organ of *sensation*. It is very small, and when excited, it renders the surface of the entire system so inconceivably sensitive, that the patient manifests the greatest dread of contact with any thing, and in persons of the highest susceptibility it should never be touched, at all; as I have known mischievous results to follow from its excitement, and I doubt not, in some cases, it might produce death. And yet, though the human system may be rendered so exceedingly sensitive by the influence of another, it seems still more wonderful, that it can by the same agency, be so completely deprived of all sensation from the infliction of violence, to such an extent, even, that the teeth have been extracted, the limbs amputated, and various difficult surgical operations performed upon the system, without the patient's knowledge, and without the infliction of the least imaginable degree of suffering. A case is detailed in the 4th number of 1st volume of the *Magnet*, of an adipose tumor, cut out of the arm of a lady, while in a state of somnipathy. The tumor was five inches long, and five in breadth, at the lower half; and though the lady was exceedingly nervous and fearful in her normal state, yet she knew nothing of what had been done to her, till restored to her waking state.

More recently the papers have given an account of a patient in the Wellow Hospital, Nottingham, England, who had his thigh amputated while in this state, and it is curious enough, to see how unwilling some of the medical profession

seem to be, to admit any thing in favor of the agency of pathetism in that case. Sir R. Dobson* adduces a number of cases, to show, that patients have borne surgical operations without giving any signs of suffering, without the aid of pathetism or opium, and then adds:

“If ever I have wanted to magnetize a man who was about to undergo a painful operation, I have done it by *working upon his mind* through his ears, (not by moving my hand before his eyes), and have, over and over again, succeeded in creating in my patients, a fortitude and resolution under which they have never murmured during the operation.”

Now, I should like to know, what Sir R. Dobson would make the difference to be, between an effect, produced *on the mind*, through the *ears*, and the same thing done through the eyes, or through any other sense? The truth is, he does not seem to know enough about the nature of the human mind, to see that in whatever way the mind is affected, the *immediate agency* is the same, and hence, when it is admitted that the mind may be affected through the ear, enough is admitted to prove all I ask, in behalf of pathetism.

(2.) The sight. This faculty may be improved, we know, in the waking state, by practice, as when mutes are compelled to depend upon this sense to supply the deficiency in hearing. We have seen an account of one who, from long practice in reading the telegraphic language of the deaf and dumb, had acquired a quickness of sight, which enabled him to read the evanescent writing, made by the fore finger of another in the air, with the rapidity of thought.

The power of sight may be increased or diminished by pathetism, and when the patient is thrown into a state of somnopathy, it would seem to be often taken from the eye and transferred to the ends of the fingers, and some are said to be able to see also, from the end of their toes. In most cases of somnopathy, the pupil is turned upwards in an unnatural manner, and if the lids be opened, nothing is discerned by the eye, except, sometimes, the operator, or whatever else he may direct the patient to look at. But, when somnopathists describe

* London Lancet, Jan. 21st, 1843.

things sometimes, with the eyes wide open, it is not certain that they exercise the functions of the eye; for, we know, that often, when they are commanded to open the eye, no impression can be made upon the optic nerve, by the strongest light. In some cases the power of sight would seem to be transferred to the epigastrium, and I had one patient who in this state, could describe nothing without putting it to the pit of the stomach; and many cases are reported where this sense has been, by catalepsy, lost to the eye, and strongly developed in the region of the solar plexus.

In two cases I have known, pathetism, as it would seem, has given the power of sight, or perception, without touch, to persons born blind. One of these patients when asleep, I have known to read scores of names, without the sense of *touch* or *sight*, or *hearing*; and she has done this in the presence of scores and hundreds of people, physicians and clergymen.

But her powers of clairvoyance are not equal to those of ordinary somnopathist, who have the organs of natural vision unimpaired. And she does not read, or describe what is altogether unknown to the operator, except in cases of sickness, or when she has been requested to describe the anatomy of the human system; and this she has done, when I had put her to sleep, in the presence of medical and scientific gentlemen, and she has done it in her own case with an accuracy which could not be counterfeited. Often, when I have put her to sleep, she has given the most *minute* and *accurate* description of the vital and mental organs, and their various functions, and I know that she gave these descriptions without any direction from me, or any other person, and without even having had any previous knowledge of the things she described. She has described things to me, in the presence of competent witnesses, which she *could not* have known before the moment when her attention was called to them.

But in saying this, I should add, perhaps, that in these cases, this patient often made mistakes, and gave accounts more or less fanciful, of most things which she was requested to describe.

The sight, also, may be increased, in the waking state, by applying the fingers to portions of the brain, and we have known patients whose power of vision by the eye would become much augmented, also, by the mere direction of the operator, when in the state of somnipathy.

(3.) Tasting. This sense may be controlled more or less in the waking state, by applying the fingers to the organs of alimentiveness, or their sympathetic points. In other cases, I have controlled it without any contact, when the patient was highly susceptible, and have known them to take water and declare it lemonade, tea, &c., merely on my offering it to them as such. But when the subject is in a state of somnipathy, this faculty is often found to be most strangely perverted; for any substance put into the patient's mouth, is not tasted at all; but when taken by his pathetiser, it is tasted, and the patient declares immediately, what it is. If the operator eats an apple, or a meal, while his patient is in this state, the latter gives evidence of the same sensations, as if he, himself, were eating. And sometimes they may be made to eat a hearty meal, and being restored to wakefulness, they are more hungry than before; but if the operator eat, and command his patient to be satisfied with it, on waking up, the patient feels that he has taken a full meal, though he has eaten nothing. Sometimes, the sympathy is so great, that if you give the patient for instance, an apple, and if, after he commences eating it, you eat salt or pepper, the patient instantly throws away the apple, declaring it to be the substance you, yourself, are tasting at the moment.

I placed a piece of copper and zinc in the mouth of a somniphist, the one above and the other below the tongue; and on bringing them in contact, he declared no sensation was produced; but on putting them in my own mouth, without his knowledge, he seemed considerably affected by it. In the Magnet for February, 1843, the case of two mutes is described, who were thrown into a state of somnipathy, and who, while in this state, exhibited many of the phenomena developed upon others. They were susceptible of *taste* and *feeling* through the operator; exhibited some of the phenomena in phreno-

pathy, and communicated with the operator by their usual signs.

(4.) Smell. In some cases this sense may be excited by holding the fingers to what the French call the "wings of the nose." When asleep, however, and sometimes when awake, like the other senses, already noticed, it seems to be perverted, or singularly transferred, to different parts of the patient's own system, or to the olfactory nerves of the operator. I have had somnopathists, who could detect the smell of substances, by holding them in the hand, and yet, the strongest ammonia, held to their nostrils while they were breathing through them, produced no visible effect, at all. But, on holding it to the nostrils of the operator, they would be strangled, and thrown into convulsions.

Being invited to operate before a private committee, the following case occurred. The chairman had requested a noted physician to inspect the proceedings, and had taken with him a phial of highly concentrated ammonia. After the patient had been put to sleep, the chairman handed the phial to the physician, and (*supposing* she could hear,) he said to me,—“Mr. S., let me pinch your hand.” But instead of pinching my hand, the Dr. held the open phial to the patient's nose for some time, during which she gave no signs of the sensation of smell at all. This experiment was repeated with the same results. I then, (unknown to the patient) took the phial, and on placing it to my own nose, the patient was quite strangled, and thrown into convulsions. Her face became quite colored, and she begged she might not be “compelled to smell that hartshorn, again, as it always took away her breath so.”

This attempt to deceive the patient should and *would* have been successful, had she not been perfectly asleep; and had there been no real sympathy between her nervous system and that of the operator, no one could be able to account satisfactorily, for the manner in which she was affected.

(5.) Hearing. This seems to be the last sense which is affected by ordinary sleep, and the first which is reached in the change from common sleep to wakefulness. And we find, al-

so, that it is the most difficult one to be affected by pathetism, for we are frequently able to produce somniphathy, and even the highest degrees of ecstasy, while the patient retains this sense, and heightened to an extraordinary degree. During the process of operating, patients are frequently annoyed by the least noise, and in a large number of cases, where every other sense seems to be closed by this process, the hearing remains the same, or more generally improved, by having the other senses subdued, so that the attention becomes wholly occupied through this medium. When it is completely subdued in sleep, the patient hears nothing, except the voice of the operator, and often, not this, unless it be *directed to him*. Thus I have often called the names of my patients aloud, while they were asleep, but they did not seem to hear, without I directed the voice to them, with the *design* that they should hear. At other times I have directed patients to wake up without the sense of hearing, and on coming back to the normal state, they have been perfectly deaf. Others still, while they hear the sound of the voice, are not able to understand what is said to them by any beside the operator, and sometimes, though they do understand, they lack the power to answer, or to give their attention to it.

But when this sense is perfectly subdued, the patient may be made to hear any other persons, either by their coming in contact with him, or with the operator, or by being directed by the latter to hear what is said. On putting an intelligent physician to sleep, he could not distinguish the notes of a piano, till I passed my hands over the keys; and at other times the patient can hear the piano, if I lay my hands upon it when at a distance from him.

Having considered the effects of pathetism upon the five senses, in detail, let us now proceed to some of the changes observed from this process upon :

2. The Muscles. One of the first effects noticed upon the muscles is, that the will of the subject cannot control them.— They are rendered perfectly rigid, and put into any imaginable position, from which the patient finds it impossible to change them. Passing the hand down the arm, and occa-

sionally clasping it with both hands, carrying it downward, at the same time, will, often, render it so rigid that it will remain an indefinite length of time, in any position where the operator places it. And, when a sympathetic relation has become sufficiently established between the operator and subject, the former may, by a mere effort of his will, render the limbs, and the entire muscular system of the latter, as rigid as if frozen, and contract them or extend them to such a degree, that they cannot be altered without manifest injury to the system. This may be done, while the subject is either awake or asleep, and the strength of the limbs may be increased sometimes ten-fold beyond what can be put forth by the subject in the normal state.

3. The Nerves. By all persons who have heretofore written on this subject, it has been assumed, as a matter of intuition, that what I denominate *pathetism*, or the "human influence," is conveyed from one system to another by the nerves of sensation, or motion, or both. Hence it has been called the "nervous fluid," "neuraura," &c. But no one of these theorists have ever been able to tell which class of the nerves, convey or receive this influence. Are they the nerves of sensation? We have already seen that the process of pathetising most generally suspends the function of these nerves, *entirely*. Are they the nerves of motion? This process usually suspends the power of locomotion, and, indeed, all voluntary muscular motion throughout the system. Hence the conclusion is inevitable, that a distinct class of organs or nerves exist, constituting a part of the medullary matter, probably, whose functions are purely *sympathetic*. This accounts for the effects of pathetism, and shows how it is that *sensations* are conveyed from the pathetiser to his somnopathist, without contact, and when the latter is wholly insensible to pain from violence done to the nerves of sensation. By this process the function is suspended, and at the same time, the subject may be made to suffer more from mere *sympathy* with the operator than he would from violence to his own system. All the *sympathetic* nervous sensibilities are heightened to an extraordinary degree, while the functions of the other nerves are partially or wholly suspended.

4. It is certain, that all the organs concerned in the functions of *animal life* may be affected, and their action modified or increased by pathetism. The stomach, as we have seen, is reached by operating on the organs of alimentiveness, and in some persons we have found other contiguous, sympathetic points, through which the same effects could be produced, or its action reversed, and fits of vomiting brought on.

The lungs are usually more or less affected, either directly or sympathetically, by this process. By placing the fingers on the points in the face where the hectic flush appears in phthisis, I have often relieved the lungs; and by a similar process the respiration and expiration may be increased or diminished. Not unfrequently, patients will be affected more or less in the organs of respiration, by the simple process of pathetising without any such design, and sometimes, severe convulsions ensue. These effects followed most of Mesmer's operations, but they are not the *necessary* results, and seem generally to come on, either through the fear or anxiety of the patient, or the want of skill or health in the operator.

All the circulations may be affected, according to the susceptibility of the patient. I have increased the pulse to 150 or more, and reduced it so low, that it could not be perceived at all, and as far as I could judge, it ceased for a few moments entirely.

I have also produced action in the kidneys, and defecation. And, in a word, the functions of the different vital organs, may be controlled by this agency in all susceptible subjects, to a degree, which is truly astonishing to such as have not made themselves familiar with its influence.

We have only to ascertain the portions of the brain, or those sympathetic points in the system, which correspond with any given organ, and it is just as easy to produce any degree of excitement or change in the functions of these organs, as it is to affect the patient at all. Nor, indeed, is this always necessary, for in many cases, the sympathetic relations of the system, are so fully developed, that decided changes may be produced in any of the animal functions, merely by operating on the general susceptibilities of the system, and passing the

hand over the part where the disease is located. In this way many extraordinary cures have, undoubtedly, been effected.

5. The Mental Organs. Whatever effects are produced by operating directly upon the vital, or mechanical organs, the cerebral organs, yield, more or less, by sympathy, in the general results. Thus, if you make the passes over the arm till it becomes rigid, the brain loses all control over that limb.—And, if you operate on any other portion of the body, the brain sympathises in the effects produced, more or less; and indeed, there is no conceivable emotion, feeling or passion, nor any action either of the human body, or of animals, fowls, or fish, that a susceptible subject may not be made to imitate by this agency. Dancing, laughing, singing, weeping, scolding, fighting, praying, leaping with joy, or raving with madness, swimming like a fish, crawling like a snake, hopping like the frog; and, indeed, any other conceivable action or noise peculiar to any living creature, may be brought out of subjects who are highly susceptible. In one moment they may be rendered wholly insensible to pain; and perfectly reckless as to their persons and character; in the next, so exquisitely sensitive that they feel like being crushed by the weight of a feather, and so fearful that the breath is well nigh suspended, lest it should expose them to some dreadful impending catastrophe.

The effects produced by operating directly upon the separate cerebral functions, will be noticed in a succeeding chapter, under the head of Phrenopathy.

6. Consciousness. My control over the consciousness of patients, is just in proportion to the susceptibility. The functions of all the mental organs may be increased to insanity, or subdued into a state of perfect repose, where the patient seems lost to this world, as really as though he had ceased to live. And from this state of unconsciousness, he may be waked up, as it were, into another world, where all his feelings, views and perceptions, differ, *toto cælo*, from those peculiar to him in his normal condition. In this state he may sometimes be made to take cognizance of the thoughts and feelings of his operator, and those in relation with himself. Sometimes he perceives distant persons, places, and things, and describes with accu-

racy, objects of which neither he nor any other person present had any previous knowledge.

If he be diseased himself, he will often point out the seat and the cause of the difficulty, and direct to the appropriate means for a cure. Or if his attention be called to the disease of another, whether present or absent, he sometimes gives the diagnosis with surprising accuracy; and the mental characters and particular habits and peculiar dispositions of persons are described in the same way, of whom neither himself nor operator could have had any knowledge beforehand.

Sometimes somnopathists remember all that took place, in the sleeping state; but generally, they remember nothing, except such things as the operator impresses upon the memory. And on the minds of some, almost any imaginable impressions may be made, when asleep, and when in the normal state, the whole seems to them as a reality. If directed to forget their own names, or places of residence, or any thing else, which they had ever known, these results sometimes follow, and I have known such impressions to remain for months, and in one case, for a year, at least.

One of the most singular effects produced upon the mind, is the change in the feelings, peculiar to somnopathists, while in this state. A lady, whom I cured of insanity, conversed with me freely about her mental difficulties, and the causes which had contributed to bring them on, but she cautioned me solemnly, against suffering her to know any thing about it in her waking state; and she extended this injunction to every thing she said or saw in her sleep, as she declared, that for her to know in her normal state, anything of what she said or did in her sleep, would have a tendency to augment her mental aberrations; and her predictions were, unhappily, verified by the malicious interference of a professed friend, who, wishing to prejudice her mind against the process by which she had been relieved, told her of things she had said in her sleep, and it excited her mind to such a degree, that it induced partial insanity; and since that, she has obstinately refused to submit again to this method of cure.

Others will speak freely of the habits and feelings, when

asleep, and disclose matters which they would on no account consent to have known when awake. This they will do, at times, both of themselves and others.

Though the mental perceptions of moral relations and duties seem to be considerably heightened in this state in the generality of subjects, yet I have usually found that somnipathists carry with them, into this state, many of their ordinary views and peculiar prejudices. I knew a skeptic, who, when asleep, maintained his deistical views, and advocated also, the doctrine of the transmigration of souls, affirming, that he had lived in a number of bodies, previous to his appearance in the one he now occupied.

But how does it come to pass, that while somnipathists are found to be so clairvoyant, in respect to things at a distance, they may be, at the same time, so strangely deceived with regard to the nature of things they hold in their hand, or which they can test by the sense of taste? A handkerchief thrown into the lap of one, becomes a babe, or a cat, or a dog, or snake, according to the will of the operator, and the substance is handled by the patient, with the same feelings which he would have, on holding these various animals. And similar deceptions may be practised upon them with regard to persons, time, and places. I have put them to sleep, and caused them to hold conversation with imaginary persons, or persons at a distance, which have been carried on with all the soberness of reality, while, at the same time, the patient was more conscious of the presence and characters of persons around him than he could have been in the normal state.

If asked the time of day by any particular watch, the patient will tell accurately, a dozen times in succession; while at the same time, if told to believe when he is waked up, that he has been asleep a week, he implicitly obeys, and does not suspect that any deception had been played upon him. I directed a patient to remember on waking that he had lived in the house where he had just been put to sleep for one year, though he had never lived there one day. On waking, the hallucination remained, and three months afterwards, on being asked how long he had lived in that family, he answered, "one

year." When told to wake up, and remain awake, one, two, or five minutes, some somnopathists will obey to a second, and when in this sleep, if directed to go into it again, at any future time, without being pathetised for the purpose, they do so, and without any seeming consciousness of the cause or the connection of one state with the other. Some, by being directed, forget the names of their friends, and, indeed, their own names, and may be made to answer to any other name as if it were their own.

And so of places. They may be made to believe themselves in any imaginable place, however distant, and when told to remember the appearance of the things they saw, on waking up, they describe them frequently, as the remembrance of a dream, and sometimes with the vividness of waking consciousness.

7. The Will. Nothing can be done without the will of the operator, and the consent of the patient. That is, no relation can be established, without the consent of the patient; but when this relation has been once established, effects may be produced without the patient's knowledge or consent.—This statement, however, should be received with some caution. It is not, by any means, true, in a general sense, that one person can put another to sleep against his *will*; especially if the subject has never been previously pathetised. Before the *will* of one person, without physical contact, can exert much of any influence upon another, so as to produce any of the effects we have, now, under consideration, a positive relation must be established between the parties.

We have seen, that the *will* controls the susceptibility; and hence, when a relation once exists between the susceptibility of the subject and the will of the operator, the former when sufficiently developed, may be made to obey the latter. Sometimes the will may be made known to the patient by words or signs, or communicated through a piece of paper, or any other substance; so that by sending a finger ring, for instance, when the patient is a mile or more distant, I have produced a state of somnipathy. At other times, this state may be induced without any other means, than a mere effort of the will,

when, as far as I have been able to judge, the patient could have no knowledge, either of the presence or design of the operator. When subjects have gone to sleep at a distance from the operator, it is not easy to prove, that they may not have been *thinking* of his designs, and thus have fallen into this state from an *apprehension* of his wishes, as I have known some to do. But other cases have come under my notice, where, as far as could be known, the patient went to sleep without the slightest knowledge or apprehension of the operator's presence or design. So, that it must be confessed, that a highly susceptible subject may be put to sleep, sometimes, at least, by mere *volition*, when the operator is not present; but this can happen only in peculiar cases, as I have already stated.

That some somnipathists may be made to obey the will of the operator, cannot admit of any doubt. I do not say, that they can be *willed* to do things that are disagreeable to them, but they may be made willing to do many things they could not be made willing to do in the normal state. And hence, it should be known, that the person who submits to this process by another, of whose *health, character, and other necessary qualifications* he is not well assured, runs a hazard far more dangerous than the patient who merely swallows the nostrum of the quack, of whom he knows nothing; and that just so far as this operation is successful, just so far he receives the *impression*, as it were, of the operator's *heart*. The *mental* disposition of the latter has much to do with the *impression* made on the person who is put into the somnipathic state. Of this fact I have had numerous *demonstrations*, which leave no room for the shadow of a doubt. All therefore should understand what results *may* follow, and those which *do always* follow, the influence which is exerted upon them by pathetism. That influence may, and should be good, and nothing but good; but this will depend, of course, upon the health, skill, and *motives* of the operator.

It is not yet agreed, among those familiar with this subject, whether the influence exerted on the subject when he is put to sleep, be purely physical, or mental, or both. By men-

tal influence, is understood an effort, *merely*, of the will, without giving any visible signs of it to the patient. The truth is, there is no such thing as an effort of the will without an exercise of the physical, or cerebral organs. We have already seen, that the mind never acts without the brain, and how it is, that the mind and the susceptibility reciprocally affect each other. We have no evidence that a mere volition without *any* previous physical contact, ever induced a real case of somniphathy. Effects have been noticed, we know, that seemed to come very near such a case; as it is well known, how powerful an influence may sometimes be exerted by the look of the eye, and from the features of the face; but I am not ready to believe, that the will of one person could be exerted to such an extent over the susceptibility of another without any *previous* physical contact. Nor is it true, that sleep could be *induced* without the operator's willing directly or *indirectly* to bring it on. But how much influence the will may have excited, in certain cases, it would not be possible to show. When I merely put a patient in a peculiar, sitting, recumbent, or standing posture, and lead him to *anticipate* relief from pain or sleep as the result, without *willing* him in any other sense, of course, my will has something to do with the effects, if any are produced; but evidently, not what has been supposed by many, heretofore. When the patient is in a state of somniphathy, and the relation is sufficiently strong, he may be made to obey the mere volitions of the operator, in various ways, and hence it is quite common for the subject to walk, raise the limbs, open his eyes, and perform various evolutions when simply willed to do so by the operator. Nor is this power confined to the sleeping state; as I have found it equally easy to exert a similar influence over susceptible subjects when awake. The only difference between them, is, in the latter case it is not so easy to communicate the *wishes* to the subject without some visible or audible sign; but when he is by any means, made to understand what my wishes are, they are obeyed; and I have as much control over the limbs and muscles, as in a state of perfect somniphathy.

Without the will of the operator, when restored to his wak-

ing state, the patient sometimes remembers nothing said or done to him in his state of *somnipathy*; nay, his own will, the machinery of his own mental operations, is frequently found to have been completely under the will of the operator. For instance: the operator says to his patient, while in a state of *somnipathy*, "to-morrow, at nine o'clock, you must read the 14th chapter of St. John." The patient is waked up, but remembers *nothing* of this direction till precisely nine o'clock the succeeding day, when he feels singularly inclined to read that particular chapter, and when the moment arrives he opens the Bible and reads it. Again: the operator says to his patient, when asleep, "to-morrow, at such an hour, you must go into this state again, or at such an hour you must fall into a state of natural sleep, and sleep just so many hours and then wake up." The patient obeys to the very letter, and this, too, without being, in the meantime, able to give any reason for what he feels inclined to do.

In such case it is seen that the will of the operator is so thoroughly impressed upon the subject, that he not only obeys while asleep, but this obedience is carried from his sleeping to the natural state of wakefulness.

8. Disposition and Character. I have had numerous cases which would seem to prove, that the disposition and character of susceptible subjects may be controlled for some time after the operation of pathetising.

A gentleman called on me who appeared to be in great trouble; and with some reluctance stated, that his wife, (otherwise an amiable woman) had long been addicted to habits of intoxication. On informing him that I thought it *possible* I might help her, either by advice, or by the influence of pathetism, or both, he brought her to see me. At the second sitting she went into a sound sleep; and by *suppressing* the activity of certain portions of the brain, and *exciting* their negative organs, she declared that she had no conceivable disposition to taste or touch stimulating drink of any kind. It is now a year since, and she has remained thus far perfectly cured.

I was called on to operate upon a patient who had been quite insane, and strongly inclined to suicide. In her sleep

she frankly described her temptations, and declared, that she would probably put an end to her existence, unless her feelings upon that subject were very much changed, which she informed me, was in my power to do. The effort proved successful, and since that time it is not known that she has been at all disposed in that way. Another of my patients had been sunk in a state of mental despair, for six years. She had been previously, quite zealous in religion, and during that time, she was known frequently to "lose her strength," as it is called, when she would appear to be exceedingly happy, and remain hours in a state of apparent catalepsy. On pathetising her, I not only removed her despair, but by exciting some of the organs, she declared herself perfectly happy, and what is remarkable, when I excited a particular organ, she instantly lost her strength and her limbs became rigid, precisely as she was formerly affected, under religious excitement. Indeed, she declared the two states to be *precisely the same*. This was a year ago, and thus far, I believe, her despair has not returned.

Other cases have come to my knowledge of a similar kind, which leave no room to doubt, but that the character, and mental disposition of persons, who are highly susceptible, may be controlled, almost to any extent by this agency. And this follows as a matter of course, if we may control the separate cerebral organs; and just as far as we may be able to cause the impressions to remain, the influence must appear in the character of the patient.

One or two cases of a similar influence are detailed in the Magnet for November, 1842, by Mr. L. N. Fowler. A highly susceptible lady, had long complained of a poor appetite.—He put her to sleep, excited alimentiveness, and after willing her to have a good appetite, waked her up. On visiting her a month afterwards, he was informed by her and her husband, that she never had a better appetite, that she had not missed a meal since he last saw her, and that she had no desire for tea, coffee, or cucumbers, of which before he put her mind against them she was very fond. Her husband added, that after being pathetised, she ate more in one day, than in three before. Formerly, she had a great passion for reading, so

much so, that it amounted to dissipation, and injured her health. Mr. F. willed her in the sleep not to read but little; if she did he would cause her to be confused and sleepy.—From that time she lost about two thirds of her relish for reading. After reading a few minutes she became tired and sleepy, and unable to finish the article she commenced.

Mr. F. pathetised a young lady with small veneration, which organ he excited, and willed her to say her prayers every night before retiring. She informed him afterwards, that she was unable to go to bed until she had said her prayers. He excited time and tune in another person, and the influence was apparent three days afterwards.

9. Disease. It would swell this volume to an undue size to attempt a detail of particular cases, which have yielded to pathetism. That it has been successfully applied after the usual courses of medical treatment had long been tried in vain, is well known. And why not, when it is a fundamental principle laid down by the highest medical authors, that “all diseases must be cured *by the inherent energies of the living system*; and that medicine can do no more than place the body in the most favorable circumstances for resisting disease.”

Whatever, therefore, tends to assist the “inherent energies of the living system,” in the greatest degree, must be the best remedial agent for the subject; and that pathetism does this in many cases, is a fact susceptible of the clearest demonstration. And it is an observation common to the most intelligent and experienced pathetisers, that the only legitimate application of this influence is in the cure of disease and the relief of human suffering. Hence those efforts for the accomplishment of these objects have always proved far more successful, than such experiments as have been carried on merely to gratify an unjustifiable curiosity. And hence, also, somnipathists will, usually, be found more ready and able to describe their own diseases, or the cases of others who need relief, than to test their clairvoyance in describing places or things, merely.

The following are some of the diseases which, to my knowledge, have been successfully treated, or greatly relieved by this

process: Head-ache, Sick Head-ache, Rheumatism, Paralysis, Pulmonary Affections, Pain in different parts of the system, Spinal Affections, Swollen Throat, Laryngites, Chorea, Liver Complaint, Neuralgia, Spasms, Fits, Hysteria, Cholera Morbus, Burns, Loss of Voice, Hypochondria, Madness, Insanity, Monomania, Inflammation, Tooth-ache, Contractions of the Muscles, Troublesome Sleep, Epilepsy, Intoxication, Delirium Tremens.

As an anodyne, or for producing a state of quietude, and calming the nervous system, pathetism may be used, probably, with greater advantage than almost any other remedy. And, as an auxilliary to the common medical agents, it has claims which should entitle it to the serious examination of all who make any pretensions to knowledge of the healing art.

10. Anomalous Results. I say anomalous results, though I am confident that all that could be put down under this head, might be traced to the laws of Sympathy and Antipathy, which, as we have seen, governs the various susceptibilities of the living body.

But these different effects should be examined, in order to determine how far they may be supposed to be produced by any of the known laws of magnetism or electricity; or whether they are produced by nervous induction, or the communication of a nervous substance, from the operator into the system of the patient.

(1.) By the process of pathetising. There are numerous mysteries attending a state of somnipathy, not particularly noticed in the preceding pages. For instance, numbers whom I have put into this state have, while in it, inquired *why* we called it a state of *sleep*? They have insisted that it was not a state of sleep, at all. One patient while in this state, does not remember he was ever in any other state; and yet, at the same time, all the ordinary avenues to the senses are fast closed. He can neither see, hear, smell, taste, nor feel, without the consent of the operator. How is this? He is alive; he can be made conscious of things, can be made to have clear and distinct perceptions of distant objects, which neither he nor the operator ever saw!

And then, again, the various ways in which different persons are affected by similar processes, would seem to set all rules at defiance.

One has a sense of heat, another of cold; another is put to sleep, and another is convulsed from head to foot. One patient remembers nothing in his waking state which took place in his sleep, except what he is directed to remember by the operator; another remembers every thing; a third remembers nothing at one time in the somnipathic state, which took place in a previous state of somnipathy; but it is not so with the fourth, who remembers every thing done in the same state at all previous sittings. Another patient remembers everything in the sleeping state, from one time to another, except what he is made to do by the excitement of any one of the mental organs; but what he does under these excitements, he never has any recollection of, except when the same organs are again excited.

It is remarkable, that in some the somnipathic state differs so essentially from the waking state, while in others it seems scarcely to differ at all. Indeed, some, I know, seem to be in a state resembling somnipathy nearly or quite all the time.—I know an intelligent lady, who assures me that she is frequently conscious of being in two different states, in which her perceptions of things are arrived at by entirely different mental processes.

Many have, no doubt, been greatly misled by what has been supposed to be the effects of the *passes*. But I am certain that the best way of putting persons to sleep, is without any passes, or any contact with the patient at all; nor, indeed, are they necessary in relieving pain, where the susceptibility is sufficiently developed. I do not mean, that any one has ever been put to sleep by a *mere mental* effort who had never been operated upon before, as I have already stated, for it is yet to be determined, as to how much the wills of the operator and the patient have to do in bringing about the results under notice. I have frequently known persons to become considerably affected on witnessing for the first time, the process of pathetising on others. This I can easily explain, on the supposition that

this *susceptibility*, and the *agency* by which we operate, are traceable into that state of the system which gives rise to what has been denominated *sympathy*. Some, we know, manifest sympathetic phenomena, who were never trained or informed about it in any way; while others manifest nothing of it, and for the simple reason, that their susceptibilities are not of the right kind.

Every person much familiar with pathetism, knows that the effects often produced on the cerebral organs do not depend merely upon any influence conveyed from the hand of the operator. Results of this kind vary, and these "variations" may be carried almost to any extent.

The same *mental* results are produced in different cases, by touching different places on the head, and in some cases, all or most of the mental manifestations are brought out, by merely touching the *toes, joints, fingers*, and different portions of the body, without any contact with the head. Touching the fingers of one patient, produces anger, love, mirth, &c. Touching the same fingers of another, the hand is moved in certain mathematical lines; and a third, declares that touching his fingers, each one gives off or receives a different influence, like, or identical with electricity, magnetism and galvanism!

But, for these different and ever varying results, in subjects both awake and asleep, neither the magnetic nor the neuraura theories render any satisfactory account, as they do not, indeed, for numberless other phenomena, which so completely annihilate many other beautiful castles, which have been so ingeniously constructed upon a few isolated facts. It has been supposed, that the true reason for these different results, is to be found in the different degrees in which the various subjects may have been *pathetised*. And I might think so too, probably, had I not performed a vast variety of experiments which go far, very far as I believe, towards demonstrating the contrary. Instance the following. Here is a person whose cerebral organs I can control, while he is awake, but he cannot be put to sleep. Another may be put to sleep, and his cerebral organs cannot be excited at all. Another is susceptible of the excitement of any portion of the brain, *provided* he

understands before hand what the impression is you wish to produce.

I shall assign in the sequel what I suppose to be the correct solution of these mysteries.

The *attraction* produced by pathetising, though real, is not *reciprocal*. The hand of the operator may, and often does attract the subject, but the hand of the subject does not attract that of the operator; and in some, there does not appear to be any attraction at all, though the subject is in a state of sound sleep.

Different results are produced by the same process on different individuals, both when awake, and after they are asleep. There are points in the face and neck, and indeed, throughout the entire system, which *sympathise* with particular portions of the brain, and this fact shows how it is, that when any organ is controlled in any way, it speaks out through the eyes or muscles of the face. But there is nothing to demonstrate the existence of any connexion between the influence conveyed by manipulation, exclusively through the *nerves* either of motion or sensation. I do not mean to be understood as conveying the idea, that they are not affected by this influence, whatever it may be; but I know, and have demonstrated by numerous experiments, that this agency is not confined to *these* nerves, nor exclusively conveyed by them.

It is well known, that when the operator applies his hand to any part of the system of a person in a state of somnipathy, neither the nerves of motion nor sensation will be affected without he *designs* to produce some such result; and often, when they are touched by a third person, the patient is not sensible of it at all!

One somnipathist hears nothing said to him by any person except the operator, unless they put their hands upon either him or the pathetiser; another will hear anything said by one whom the pathetiser directs or wills him to hear, and nothing else.

Another has the sense of feeling so much developed, that he can tell the difference in colors by it, and others have nothing of this sense, and scarcely of any other.

The truth is, no two subjects are affected in all respects, alike; and hence it is quite easy for an operator to be misled in forming conclusions from experiments, performed on a score or less of individuals. I have found what appeared to be a correspondence, not only in the phenomena which are produced on certain classes of persons, but also a correspondence in the results produced by the same operator on different subjects.

Nor can there be any doubt, but that many subjects often, undesignedly, deceive themselves and those who operate upon them. I have known some to affirm they did not hear, for instance, when I know they did hear; and others have said they did not hear because they *would* not, and consequently, refused to answer when spoken to, not because they could not hear, but simply because they did not choose to answer.

(2.) The Imponderable Fluids. I include under this term, Electricity, Magnetism, and Galvanism. And one remark should be made in the outset, with regard to them. It is this, that I have never known any results produced by these agencies upon the human system, which had any resemblance to the phenomena described in the preceding pages, *except in a few cases, where the subjects had been previously pathetised*, and a degree of susceptibility, had, by this process, been awakened in the system. I have performed various experiments with electricity and the magnet, but have never been able to produce any decided results, until I had pathetised the subject for this purpose. And in all the effects I have ever known or heard of, produced by these agencies, on pathetised subjects, I have not been able to reduce them to any of the known electrical or magnetic forces, but they would seem to fall in with what we denominate the sympathetic and antipathetic laws of the human system, enumerated in the succeeding pages of this work.

Applying a pointed steel to particular organs in the head of some subjects, the function of one is *excited*, while by the same means another is *suppressed*; and applying the instrument to portions of the head, and noticing that one side was repelled, while the opposite would be attracted, first led me to

the conclusion, that the different cerebral organs were balanced in opposition to each other, and hence I called them *positive* and *negative*. But nothing of this kind have I ever observed, from persons who had not been previously pathetised. Persons of extraordinary susceptibility will be affected by holding one end of an iron bar, in the hand of another person; but they are affected, usually, just as much, if no one holds the other end. Some have gone to sleep merely by holding a natural magnet in the hand, or by having the passes made over them with it; but such have first been influenced by pathetism, and the same remark is true of the case described in the first number of the *Magnet*, where a lady, after having been repeatedly pathetised, fell into a state of sleep on the approach of a thunder cloud; but while in this state, her pathetiser had the same influence over her, as if he, himself, had operated in order to bring about the result.

A highly susceptible subject of my own, was affected directly the reverse of this, for when asleep, I had to wake her up on the approach of a thunder cloud, and merely turning an electrical machine, within forty feet of her, when asleep, would throw her into spasms.

Some somnopathists are favorably affected by the touch of a magnet or any metallic substance; and others are so much disturbed by being touched by them, that it either wakes them, or they become convulsed. One is *attracted* by it, and another is *repelled*. The north pole attracts one portion of the system of one patient, and repels the same portion of another; and so also of the south pole; and, indeed, the same effects are produced by the application of any metallic substance, and sometimes, when the pathetiser merely holds a piece of iron, or steel, in his own hand, unknown to the patient. Nor is it always true, as has been supposed, that effects produced by the magnet, cannot be removed without it, as we have had patients, when affected by the application of any kind of metal, who could be relieved *only* by pathetism, without any other means. The same is true, with regard to *minerals*. They do not seem to be uniform in their effects upon different patients, nor upon the same patient, at differ-

ent times ; and never having been able to produce any very decided effects, either with minerals or electricity, until the subject had been previously pathetised, and thereby rendered highly susceptible, or in a few cases where the susceptibility had been supernaturally developed by disease, it would not, perhaps, assist us much in this enquiry, to give the details of these experiments. The history of Perkins' *Tractors* would be sufficient to show, that a susceptibility may be created in the system, which yields as readily to a piece of wood, as to a piece of steel or brass ; and having now sufficiently prepared the way, I proceed to state, what may be considered some of those laws of *life*, which give the true reasons for these various influences, exerted by so many apparently discordant agents over the human body.

CHAPTER VI.

THEORY OF PATHETISM.

What is the nature of that agency which has generally been known under the terms Living Magnetism, Mesmerism, or Nervous Fluid? Is it any thing different from the ordinary forces of Electricity, Galvanism, or Magnetism? Or, does the human brain eliminate a fluid or current, similar to the magnetic forces, and which is governed by laws peculiar to itself? Many theories have been fabricated in answer to these questions; but still, the subject would seem to be far from having been satisfactorily settled. It is, certainly, one of some difficulty; nor can we anticipate the time as very near, when scientific minds will give it that attention which its importance would seem to demand; and, much less, that they will very soon agree as to the real nature of this influence, whatever it may be.

It will not be necessary, perhaps, for me to attempt a detail of the various theories which have, from time to time, obtained upon this subject. Having examined some of the effects of the agency I denominate *Pathetism*, or, as Mr. Townshend calls it, "human influence," we may now be able to judge as to what those laws must be, by which such results are produced. The following is a summary of the conclusions at which I have arrived; and, whether they assign the true reasons for the phenomena I have described, or not, will, of course, be left to the decision of my readers.

THEORY.

I.

That *Animal Life* is an *Element*, possessing *attracting* and *resisting forces*, peculiar to itself; and which control matter and the imponderable fluids.

II.

That these *vital forces*, give those *qualities* to 'the body which constitute a *sympathetic system*, and render all its parts *susceptible* to *sympathetic* and *antipathetic Laws*.

III.

That these *Laws* depend upon certain *Relations*, which different substances, or entities, sustain to each other.

IV.

That the nature of these *Relations*, between two or more substances, organs, or entities, depends upon the *difference*, or *likeness*, in their *qualities* or *functions*.

V.

That the *susceptibility* of different persons depends upon the developments of the *ganglionic*, or *sympathetic system*, which unites the mind, and the nerves of sensation and motion.

VI.

That a peculiar *connection* between two entities, organs or substances, which differ in certain *qualities* or *functions*, produces a *positive relation* or the law of sympathy. A connection between two which are precisely alike, produces a *negative relation*, or the law of antipathy. And, where bodies or substances are brought together which do not come up to a certain degree of difference, in quality or functions, a *neutral relation*, or a state of *apathy*, is the result.

VII.

The functions of the mental organs are balanced by *contraries*, one against another. That is, they not only exist in pairs, but in groups, or families, in each hemisphere of the brain; and the pairs, and groups, are balanced by other pairs and groups, whose functions are *directly opposite*. On the due development of these *normal relations* does *consciousness* and *mental power* depend. For, when they are deficient, or become disturbed or exhausted, the results appear in *the states of the mind*, such as *idiotcy*, *monomania*, *insanity*, and *sleep*. - When the normal sympathetic relations are disturb-

ed between the cerebral organs and the nerves of motion or sensation in other parts of the system, the results are shown in apoplexy, paralysis, and other physical irregularities.

VIII.

The *mind*, and this *susceptibility*, or the *sympathetic system*, reciprocally act upon each other. The latter is the *medium* through which the *emotions* and *volitions* of MIND are manifested, and through the same *medium* all its impressions are received.

IX.

By establishing a *positive relation* between two persons, the mind of one may thereby control the *susceptibility* of the other; or by applying the hand of one to any part of the other, different mental and physical changes, may thus be produced. Hence it follows, that the only influence extended from one mind or body to another, depends upon the kind of *relation* established between them, and the same is true, with regard to any influence felt by the living body, from any other cause.

X.

A positive relation is kept up, between the vital organs and the substances on which the system depends for its nourishment, such as air and food, and, also, by the different functions of these organs; and upon the proper balance of all the different relations depends the health and vigor of the body. Their disturbance produces disease, and their annihilation, death.

XI.

The muscles and limbs are moved through these relations, which exist between different portions of the same muscles, and also, between these and the sympathetic nerves, through which the mind operates. From which it follows, that there is a *reciprocal* influence between the different nerves and the other organs of the entire system; and hence it is, that the state of one organ, or part, is changed by the state of another, with which it is in positive relation.

XII.

These sympathetic relations exist between the *mental* organs and the nerves and muscles of the face; they shape the features, and thus lay the foundation for all that may be known of Physiognomy; they give the contour to the entire system, so that relations may be traced between all the mental and physical developments; and from corresponding points of sympathy, throughout the body, the different cerebral organs may be excited and controlled by those external agencies, between which and the *susceptibility* a positive relation has been established.

XIII.

The positive and negative *relations* are controlled in certain cases, by the mind; so that the system is positively or negatively affected according to the *mental apprehensions*. In the same way relations may be created, or transferred from one substance to another. When the mind has been once impressed to a certain degree, from a mere *apprehension* of an influence from any cause, it takes *cognizance* of this *relation*; and in cases of *high susceptibility*, it does sometimes either create, or transfer it from one substance or agent, to another; and hence the system is affected, precisely according to the *anticipations of the mind*, and not according to the real qualities of those things to which the relation has been transferred.

XIV.

The various *vital, organic, and mental functions*, are carried on by these different relations; and from which it must follow, that upon the latter does the *healthfulness and integrity* of the former depend. And by applying those agencies which change these relations, we may increase or modify the mental or physical powers, and thus the *five senses* may be *transposed* and concentrated entirely in the *sympathetic system*; or they may be wholly suspended, or even transferred, to the sympathetic system of the operator.

XV.

It is a universal *law of nature*, that *positive results* are

produced by a relation between an agent, and a subject, or two or more substances, brought into *relation* with each other. It is only by establishing a connection between *two* things, or forms which differ in quality, that a positive result differing in quality from either of the two is produced. This is the *first law of Pathetism*, and from which we see how it is, that one may not be able to produce the same effects upon different persons.

This theory, itself, presents my reasons for rejecting the common views of a universal fluid. But yet, it may be necessary, in order to do the subject justice, that I should add a few remarks in answer to the following inquiries:—

1. IS IT A UNIVERSAL FLUID ?

It is not necessary, here, to inquire whether there is any difference between galvanism, magnetism, and electricity. It is generally admitted, that these terms designate, essentially, one and the same agency; and in this sense I shall use them. And it must be borne in mind, also, that these forces pervade all matter, and hence they must, more or less, affect the living body. We have further seen, that the electricity of the air, and the magnetism of the earth, may influence the vital phenomena in a greater or less degree. The lunar and solar influences have been referred to; but, it is certain that the vital forces control or resist these influences, as we have seen in the cases of heat applied to the living body. If this power were not inherent in *vitality*, it is not possible to determine how life could be perpetuated for any time. And, I shall not be expected, perhaps, to account for cases where, it is said, the needle has been affected by the approach of the human hand. But, though I have often tried, I have never *seen* any results of this kind. And even if any such have been produced, a few of them could not outweigh the mass of preponderating facts which every where meet us, when examining this subject. They would merely prove what we all know to be true, that the human body has sometimes exhibited certain galvanic properties, which, however, do not depend upon any peculiar process, as far as is now known.

And, I may also be referred to a few cases, where a state of sleep has been brought on by the approach of an electrical cloud, or the application of an ordinary magnet; and it may be said, further, that many of the phenomena attending somniphathy are so very much like the effects of magnetism, that it is reasonable to conclude that this is *the* agency by which these results are produced. To which I reply:—

1. *No effects of this kind are known to have been produced, until the system had been previously operated upon, and rendered highly susceptible by pathetism.*

This fact, alone, is sufficient to forbid the assumption, that the mere magnetic forces constitute the agency by which these results are produced. With a galvanic battery life may be annihilated from the body; but, no one was ever put into a real state of somnium, or somniphathy, by a battery, till the system had been previously pathetised. We know, that various effects may be produced upon the physical organs, even after death, by galvanism; but nothing resembling the phenomena I have described in the preceding chapter, were ever induced by electricity.

If it be said that “Magnetism, in an organised form,” produces these results, I might ask, what magnetism is in an organised form? and what gives it this organisation? If it is life, then there is something in animal life which controls the magnetic forces, as I have already shown. If magnetism has a different form in living bodies from what it has in any other substances, it must be owing to the vital forces; these, therefore, cannot be magnetism.

2. *The magnetic forces reciprocally affect each other.*—That is, the positive pole in magnetism *attracts* the negative. Two pieces of iron differently magnetised, equally attract each other. But we have seen, that in pathetising, though the subject is attracted by the operator, he, himself, produces no such effects upon the latter. Nor, indeed, could such an effect be anticipated agreeably to one of the first laws of nature. We have seen that one must be the *agent*, the other the *subject*, and if the subject could affect the agent, to the same extent he, himself, is affected, it would be in direct opposition

to the well known course and constitution of things. Nothing is known of the electrical laws, by which it could be shown, why the physical attraction between the operator and patient should not be reciprocal, if this agency were magnetism; nor why the former should not be able to attract his patient, so as to raise his body, entirely, against the force of its own gravitation. It is well known, that the patient, in some cases, may be so strengthened and excited by pathetism, that he will be able to lift more than his own weight. But, in such cases, no one was ever raised, entirely, by these forces, which, however, the operator should be able to do, if the magnetic forces constitute the agency by which he attracts the limbs or muscles of his patient. And in this case, if the operator were to place his patient alone in a boat a few rods from himself, on shore, should he not be able to draw him that distance over the water? Why not, if this attraction be magnetism? Nor is this all; if this agency be magnetism, it should be just as easy for an operator to magnetise a piece of iron by making the passes over it, as it is to affect a living body in this way. But we all know, that this is not, by any means, the case. The power which the operator is able, many times, to exert over his patient, is truly astonishing; and yet this same influence, when directed to a few minute iron filings, is not sufficient to produce the least imaginable effect. And, though we know that electricity may be evolved by the living body, sometimes in sufficient degrees so as to effect the electrometer, and even to give off sparks, yet, these same bodies are not any the more susceptible to pathetism, on this account, alone, nor do they seem to possess any more than ordinary power for inducing the sleep in others. And besides, if it were the natural tendency of magnetism to induce sleep, it would always have this effect when the magnet was applied to the system.

3. *The radical difference in the results produced by this agency, proves that it cannot be the magnetic forces.*

The effects of the electrical forces, when they can be produced at all, always agree, both as to their nature and in the laws by which they are evolved. But, by manipulation,

scarcely any two bodies can be affected alike. By the same process by which one may be put to sleep, another may be waked up; and the same fingers which suppress the action of one or more of the cerebral organs, excites them; and this, too, when the patient is asleep. The ever varying discrepancies in the effects produced by manipulation can never be reconciled with the assumption that the agency is magnetism or electricity.

4. *The effects produced, it may be, by the application of metallic substances to the living body, even before it may have been pathetised, do not prove the agency to be magnetism.*

Precisely the same effects have been, and may be produced by any other substance. Who has not heard of Perkins' "Tractors," of whose potency thousands and tens of thousands, of all ranks and profession, but a few years ago, professed to have experimental knowledge. Indeed, it is asserted on the best authority, that Perkins returned from England possessed of ten thousand pounds sterling, which he received for cures performed by the use of two small pieces of different kinds of metal, pointed and polished in a peculiar manner. And never, perhaps, were so many of the medical profession, and other intelligent persons, so egregiously deceived as to the true nature of any medical agency, as in the matter of those tractors. And at the present time, so general has this conviction become, that these tractors seem never to be mentioned but in derision, and to remind the unwary how easy it is to be led astray by deductions drawn from facts of this kind.

It was assumed by Perkins and his disciples, that the influence of those metallic points was electrical, and this accounted most satisfactorily for numerous cures performed by them, some of which were, indeed, of a most extraordinary character. But Dr. Haygarth was the first to suggest, I believe, that *wooden* tractors would, probably, have a similar effect; and accordingly Dr. Falconer selected five persons for an experiment, who were labouring under chronic rheumatism in the hip, knee and wrist. Wooden tractors had been prepared, and painted to resemble those made of metal. Their first trial was made January 7, 1799, and proved, of course, success-

ful. Three were much benefited. One felt his knee warmer, and could walk much better. Another was easier for nine hours till he went to bed, and then his pain returned. Another had a tingling sensation for two hours. The next day, the metallic tractors were employed with the same effect as that of the preceding day.

This led to further experiments of a similar kind; and they were continued, until the physicians became fully satisfied, that the wooden tractors were of the same utility with the metallic, provided the patients *supposed* them metallic.

Similar experiments were shortly made at Edinburgh, and the result was the same. A servant girl, afflicted with a most acute head-ache, which had rendered her nights altogether restless for nearly a fortnight, readily submitted to be pointed at with these *wooden* tractors. The operators moved them round her head, but never *touched* her. In a few minutes she felt a chilliness in the head; in a minute or two more, she felt as though cold water was running down the temples, and the pain was diminished; in ten minutes more she declared that the head-ache was entirely gone; and the next day she returned to express her thanks to her benefactors for the good sleep she enjoyed through the night.

It is to be regretted that the medical profession did not profit by this discovery, instead, as they seem to have done, turning the whole subject into ridicule, and attributing cures really performed to a mere imaginary cause, that never had any real existence. Though some of them thought, no doubt, that by referring all that was done to the "imagination" they had given the true explanation of these phenomena, and placed the subject where it would never again be agitated by the expression of any doubt.

Perkins attributed the influence of his tractors to *electricity*,—the physicians, after the wooden tractors were found equally efficacious, attributed it to the *imagination* of the patient.—Neither party has given the true *version* of the mystery. The facts detailed in the preceding pages, as well as the history of these tractors, are abundantly sufficient to show, how it is that the mind *creates* or *transfers relations* from one subject

to another, and by which the susceptibility becomes affected according to the mental apprehensions, and not according to the real qualities of those things to which the relation may have been transferred, as I have already shown. Indeed, there is enough in the facts connected with Perkins' tractors to annihilate, for ever, the notions which have prevailed with regard to animal magnetism, or the influence of a "universal fluid" over the living body, which is exerted, and modified, merely by manipulation or the mental efforts of the operator.

5. *Its effects on animals.*

It is worthy of notice, that though this agency has so long borne the name of "*animal magnetism*," no effects have ever been produced upon animals which amount to any thing at all. We have seen, that animals have a degree of susceptibility which is peculiar to the living body, but nothing upon which you can operate by the magnetic forces. But if this agency be magnetism, there is nothing to hinder its effects on animals, in as great a variety of degrees, as on human beings. We should not only be able to put them to sleep so that they could not hear, see, taste or feel, but should also cause them to walk, if not to *talk*, in this state.

If it be objected, that animals have not the cerebral organs for the same manifestations, then it is admitted, that this influence is something more than magnetism; it is one which is *peculiar* to cerebral developments. Thus admitted, I do not see what objection could be successfully urged against the preceding theory.

6. *The nerves are non-conductors of electricity.*

I have already adduced a number of admitted facts, in the Chapter on susceptibility and sympathy, which can never be reconciled to the assumption, that this influence, whatever it may be, is *evolved, received and transmitted* by the nerves.—And I may now add, that if the nerves should be found to be non-conductors of electricity, this question must be considered settled.

The following account of a paper recently read before the Royal Society, by Dr. James Stark, is from the *London Athenæum* for March 4, 1843:

“The author gives the result of his examinations, both microscopical and chemical, of the structure and composition of the nerves; and concludes, that they consist in their whole extent, of a congeries of membranous tubes, cylindrical in their form, placed parallel to one another, and united into fasciculi of various sizes; but, that neither these fasciculi, nor the individual tubes, are enveloped by any filamentous tissue; that these tubular membranes are composed of extremely minute filaments, placed in a strictly longitudinal direction, in exact parallelism with each other, and consisting of granules of the same kind as those which form the base of all the solid structure of the body; and that the matter which fills the tubes *is of an oily nature*, differing in no essential respect from butter or soft fat; and remaining of a fluid consistency, during the life of the animal, or while it retains its natural temperature, but becoming granular, or solid, when the animal dies, or its temperature is much reduced. As oily substances are well known to be *non-conductors of electricity*, and as the nerves have been shown, by the experiments of Bischoff, to be among the worst possible conductors of this agent, the author contends, that the nervous agency can be neither electricity nor galvanism, nor any property related to these powers.”

And we should probably arrive at the same result, from a similar examination of the other tissues, and the fluids of the living body. The blood has been said to be strongly impregnated with iron, but it has never been satisfactorily proved.—But even if it were so, this fact would not assist the magnetic theory. We do not find that the blood is attracted by the magnetic any more than the nervous matter; and indeed, it would be easy to show, that if this agency were electricity or magnetism, surrounded as we constantly are, with such quantities of metallic substances, it would be next to impossible to restore either health or life, or to avoid, without the greatest trouble, the ever attracting influences which they would be constantly exciting over us.

2. IS IT A NERVOUS FLUID?

Are the effects produced by manipulating the human system, which appear in sleep, and mental excitements, caused by the communication of a *neuraura*, or *fluid*, from the operator, and received into the nervous system of the patient? The question now under notice, is not, whether there is not what has been called a fluid, or substance, exhaled from the extremi-

ties of the nerves, though the highest medical authorities admit that if such a fluid exists, it is of so subtle a consistence, as never yet to have been detected, either by *taste*, *sight* or *smell*. Nay, they further admit, that the constituent principles of this liquid are perfectly unknown, as they cannot be rendered visible by art, or proved by experiment.* But it is assumed, that such a fluid must exist, because, on making a ligature on a nerve, the effects of volition or sensation are suspended. There may, indeed, be a fluid peculiar to the veins, arteries, muscles, the viscera, and indeed the osseous parts of the system.

Nor is the present enquiry as to whether there are certain exhalations from the surface of the human body, of carbon, or carbonic acid gas, or a peculiar odorous substance. What we wish to ascertain, is, whether the brain or nervous system eliminates a *fluid*, which is *received into the system* of the subject, who is affected by pathetism? When the fingers are applied to the cerebral organs, and the subject manifests any given emotion, is that emotion excited by the reception of a nervous substance from the hand of the operator? Or when one operates upon another, (as it is said,) by his will, merely, is there in this case, a *transmission* of any fluid or substance from the nerves of the operator, into the nerves of the patient?

The following are some of the reasons which incline me to the negative of this question:—

1. *The results produced without any physical contact, and without any effort of the will.*

It is susceptible of the clearest demonstration, that sleep, for instance, may be induced without any physical contact, or any mental effort of the will of another, whatever. And so of many of the results already described in the preceding chapter. To suppose the transmission of a fluid in the case of the wooden tractors, or in the case of the non-magnetised tree of Mesmer, is perfectly preposterous. When the patient touched a tree that had not been magnetised, he was seized with convulsions; but when he came in contact with the tree upon which the operator assumed to have thrown the magnetic fluid,

* Dr. Hooper.

he was not affected at all! No wonder the French commissioners put the seal of their condemnation upon Mesmer's theory.*

Take the case of the cure of the cancer, effected by the application of the hand of a corpse. Is the nervous fluid transmitted from the hand of a dead man? Or, the cure performed by the East Indian. Who can believe, that in these and the thousands of other similar cases, the change was effected by the *transmission* of a nervous fluid? And so of the method recommended for testing what has been called the "impresibility" of persons to the "neurauric influence." The patient is directed to take hold of an iron rod or bar, held in the hand of the operator. If he feels any sensation in his hand or arm, the "neuraura" is said to have been transmitted from the hand of the operator, by means of the metallic conductor, into the arm or hand of the subject. And I have seen numbers of the medical profession operating in this way; and when they found persons thus affected, they have taken it for granted, that a nervous current was thus received by the patient from the operator. And during this time, they seem never to have once thought of the *wooden tractors*; and what the disciples

* When Dr. B., the originator of what is called the Neurauric theory, was in this city, in the fall and winter of 1842, the following incidents occurred. He had a highly susceptible subject; and whom he had impressed with a deep *antipathy* against an operator whom I will call Mr. S. It so happened, that the Dr. was invited, one evening, with his subject, to a house where there was a person whom Mr. S. had pathetised some three months before. And, of course, his subject took it into his head to become very much convulsed on coming near the person whom he *thought* Mr. S. had operated upon, and he was so much affected, that the Dr. found it somewhat difficult to relieve him. The reason *assigned* was, that he could not touch or even come near persons who had been operated upon by Mr. S., as the *neuraura* given off by them was so offensive to him! A few evenings after, Mr. S., (unknown to the Dr. or his subject) came in contact with the latter, sat by his side, and put his hands upon him, but it produced no effects at all. This is one of many other facts which could be given showing the fallacy of the Dr.'s assumptions about the *transmission* of a nervous current. If his subject was affected in the first case, as he *thought* he was by a nervous current from the patient operated on by Mr. S., why was he not still more affected when he came in contact with Mr. S. himself? Answer, because, in the first case an influence was apprehended, in the other it was not. In the first case, effects were produced without any physical contact; in the other there was physical contact, but no effects followed as the result.

of this theory will say, when they come to find out that the same feeling in the hand or arm of the subject *may* be induced with a wooden rod as well as with a metallic one, and, indeed, without any rod at all, or any contact with the operator, remains to be seen. Something must be allowed, of course, for the habits to which patients may have been trained. If they have been accustomed to a metallic rod, they will be most affected by that instrument; and the same remark may be made of ivory, wood, or anything else.

But, that persons often sink into a state of real somniphathy, without any influence from physical contact or the will of another, is a matter of certainty. I have known persons to fall into this state, partially, who had never been pathetised, merely by seeing me operate on another; and, times without number, have I had my patients fall into this state, when they have been in the same room, or in the same dwelling where they knew I was operating upon others, when I had no volition at all upon the subject. Only the present week, a patient on whom I had not operated for more than six months, happened to be present while I was pathetising another; and though she was decidedly opposed to going to sleep herself, and though I did not wish her to fall into this state, yet, she did so. And what was remarkable, when asleep, she refused to let me touch her for the purpose of waking her up; and after remaining in this state all night, she remembered nothing of what had happened, on waking up the next morning. Her opposition to being pathetised arose from her dread of ridicule; but we see from this case how it is, that the mind of a person overcomes the susceptibility, and induces sleep, without any will on the part of another, and indeed, in some cases, even against the wishes of the patient himself.

But I may be referred to cases like the following:—the patient is blindfolded, and the operator merely brings his fingers within an inch or so of any particular organ, and its function is excited. Or, the patient places his finger near any given organ in the head of another, and his own mind becomes affected.

To this I answer:

(1.) If the excitement of the separate organs is caused by the actual transmission of a fluid, the results should always be the same; that is, the emotions excited in one subject should be the same as those excited from precisely the same place in the head of another. But this is not the case; for though the cerebral organs may be excited without contact, in some subjects, yet the same feelings are not always excited from the same locations, in different heads. These discrepancies can be accounted for, only, by the laws of sympathy before described.

(2.) Exciting the cerebral organs without contact, no more proves the transmission of a fluid, than the relief of pain, or sleep, induced without contact.

(3.) The cases in which the cerebral organs can be controlled by pathetism, to any considerable degree, are very few; and hence, it is hardly safe to deduce a general law from these few cases.

(4.) Among the subjects susceptible of cerebral excitement, by manipulation, the number is fewer still whose organs can be controlled without any contact; and the world over, perhaps, not one individual was ever found, in whom each of the organs could be excited without contact. But, if one organ may be excited in this way, and if there be an actual transmission of a fluid into the brain of the subject, it is plain, that we should be able to excite one organ as well as another. But this is not, by any means, the case.

2. *Effects produced on idiots and infants.*

Every operator must have noticed, how much more difficult it is to affect infants and idiots, than it is adults, and persons in whom the cerebral organs are fully developed. But, if a fluid be actually transmitted, why should it not be received with equal readiness into the heads of idiots and children?—Infants, who have all the organs proportionably large, are not (other things being equal,) so easily affected as adults. Nor, indeed, am I aware that there has ever been an instance, where the cerebral organs have been separately excited in infants. But why not? Why should not the finger of the operator transmit the neuraura to the organ of Benevolence or

Self-Esteem, in a brain six months old, as easily as into one twenty-five or thirty years? The true reason is, these effects, in many cases, depend much upon the mental apprehensions of the subject, as I have already stated in the preceding theory.

3. *The different results from the same locations, and the same results from different locations.*

For instance: in one subject Combativeness is excited by touching the "bridge of the nose," so called; in another, by touching the muscles in the under lip; in another, by touching the scapula; and in another, by touching one of the fingers or teeth! Can any one, in his senses, believe these results to be produced by the transmission of a fluid?

But, to get rid of this difficulty, an advocate of the fluid theory tells us, that in these cases the patient is under the control of the operator's WILL, and, therefore, these results are not to be depended upon! Just as much as the man who makes this objection, and no more. I have operated on hundreds, and, I may say, thousands of cases, where I know that the subjects were no more under the influence of my will, in the sense above supposed, than any other person whom I never saw. I have put them to sleep by my will, as it is called, and without it—I have examined this agency in every imaginable aspect, and tested it in every conceivable manner possible, and affirm what I know, when I say, that I have induced these different results from persons who were not asleep, and from others who were, and yet, they were not caused or modified by my will, in the least conceivable degree. The inference, to my own mind, is irresistible, that the notion of a *fluid* transmitted from the operator to the subject, is utterly unfounded.

How could a subject be influenced by my will, when I had no will about the result, as to what it should or would be? The truth is, many operators have, unquestionably, been most egregiously deceived as to many things they have attributed to their own wills. How the susceptibility is controlled by the will, and how the will and the susceptibility reciprocally act upon each other, I have already shown. But, to assume

that, when I touch the same organs in three different subjects, and they every one manifest a different result, one must be more in love with theories than I desire to be, to believe that the results are either caused by the transmission of a fluid, or that they are the results of my own volitions, when I know that I exerted no will in the cases at all, and the patients were no more controlled by my will than the chairs on which they sat.

4. *The immediate agencies for affecting the mind, must, in all cases, be the same.*

Titillation of the feet or sides, excites the organs of mirth. Is there, in such cases, a fluid transmitted? And what is the difference between the agency by which mirth is excited, either by tickling the soles of the feet, or by applying the fingers to the organs of mirth in the head? A tread upon a gouty toe, not unfrequently excites the organs of Combative-ness. Is there a fluid transmitted in such cases?

How often do we feel our Hope, Faith, Courage, Devotion, Love, and Benevolence excited, by what we hear said in a public assembly; and in this way, thousands of organs are all excited at the same moment. Is there a fluid transmitted in such cases? Who can believe it?

But I might ask, what excites emotion in any case? What is the immediate agency which excites feeling of any kind? If it be by a fluid eliminated in one case, why not in all? and if the hand transmits this nervous current or fluid, on applying it to the head, how is it to be rationally accounted for, that this fact was never discovered before the nineteenth century? How has it come to pass, that among the millions of millions who have had their hands upon each other's cerebral organs, since the world began, not one of them ever received this fluid in any perceptible degree, before the year 1841? Really, to swallow such an assumption, one needs an organ of Marvellousness, to say the least, much larger than the one possessed by the writer of these pages.

The truth of the case is, most who have ever manifested any interest in the investigation of this subject, under whatever name it has been presented, have taken it for granted, all

along, that there must be a magnetic or nervous fluid actually transmitted in order to produce these results, because those who have gone before have said so. And thinking of no other way for solving all the phenomena which followed the process of manipulation, we have readily adopted the crude notions of others. And this is the more remarkable, when we examine the results of the wooden tractors, together with the history of Mesmer's operations, and observe what an abundance of facts they present, which go directly to annihilate the fluid theory. A few of these facts the reader will have seen in the foregoing pages; and if, after digesting these, he can make out an explanation more to his mind than the one presented in the present work, let him not withhold the light which it may be in his power to shed upon this intricate subject.

CHAPTER VIII.

PATHETISING.

From an examination of the principles laid down in the preceding chapter, an answer will have been obtained to the question so frequently asked, "Have all persons the necessary power for pathetising?" It is plain, that this power depends, not on the health and character of the operator merely. There are many assisting and disturbing causes, and the whole must be considered together, before we shall be able to judge with any tolerable accuracy as to the power of any one to produce any given results. Some things depend upon the operator, others upon the patient, and others, still, upon the persons or circumstances with which they may be surrounded during the operation.

Before coming to particulars as to this process, it may be necessary to explain, that by a *pass* is simply meant the act of passing the hand over any part of the system. This is done with the fingers loosely extended, and moved downward quite lightly over the head or limbs. Reverse passes are made upwards.

The nerves of sensation are more fully developed in the hands, and hence the fingers become the principal organs of touch, so called; and the Sacred Scriptures recognise its use in the communication of blessings, as when the patriarch Jacob placed his hands upon the heads of Joseph's children, and pronounced his blessing upon them. The attempt to excite kind feelings in the mind of a friend, is usually accompanied by taking him by the hand and looking him in the eye. In pathetising, therefore, the hand becomes the principal instrument for exerting this agency, and applying its influence to different parts of the system.

1. THE OPERATOR.

It could not be supposed to be a matter of indifference with persons wishing to be treated by pathetism, whether the person who is to perform this operation be qualified, or not. No person willingly trusts his health with one whom he, himself, considers a quack. Let us notice, then, a few things, of which we should wish to be well satisfied, before submitting to this method of treatment.

1. *Health.* Nothing can compensate for the want of *sound health* in the operator. He should not only be free from all constitutional or nervous difficulties, but he should be *perfectly WELL*. We have known a number of cases, where disease has been communicated from the operator to the patient. If the former be nervous, feeble, or sickly, as a matter of course, we should expect the patient to sympathise with him, and to become diseased, just in proportion to the influence exerted upon him.

2. *Temperament.* Persons of what are called nervous or lymphatic temperaments, do not usually succeed so well in pathetising. The best temperament for the operator is that called bilious, or nervo-bilious. The sanguine, or a mixture of the bilious and sanguine, is also a good temperament. But it should be understood, that the temperament, whatever it may be, should be *different from that of the patient*.

3. *Age.* The operator, of course, should be neither green in youth, nor decrepid with age. During the first stages of adolescence, the mental faculties are not sufficiently matured, and the physical energies but imperfectly developed. The vigor of manhood is the time for the full exercise of this power, and the period when the system can best endure the exertion necessary for its application to the cure of disease. In youth and old age, the physical and mental strength become soonest exhausted, and during these periods the vital forces are barely sufficient to supply the wants of his own system.

4. *Mental character.* Large Pity, Benevolence, Firmness, Self-Confidence, Concentration, Conscientiousness, and Perseverance, are the necessary mental qualifications. These are other phrenological developments which go to constitute a

well-balanced head; but when either of the above qualities are wanting, it makes a marked deficiency in the character of an operator.

Much may depend on the mental disposition. He should be possessed, especially when operating, of undisturbed *calmness, decision, and kindness of heart*. A rough word, or the indulgence of any passion, while his patient is in a state of somnipathy, might produce serious mischiefs, and such as he might find it impossible to control.

5. *Good motives*. Every patient, of course, possesses the undoubted right to judge of the motives of an operator, and hence our chapter would be incomplete, without a statement of what they should be. And besides, it has much to do with the success of an operation. Is it not a matter of intuition, that what we attempt from a sincere desire to do good, we prosecute with far more confidence of success, than when, conscience-smitten, one undertakes what he knows to be wrong? Every sinner, when seeking an unworthy object, is discouraged with more or less *fear*, and want of *confidence*; and these are states of mind which are every way unfavorable to that quiet and self-respect, which are necessary for operations of this kind. The more *faith* and expectation of success the better. This is a principle of the Christian religion, and it holds equally good of every judicious, well-meant effort, for the relief of human suffering.

6. *Skill*. The knowledge of the pathetiser should be of *this subject*, and the laws by which it is to be applied for the cure of disease. The most learned and intelligent in mathematics, languages, medicine, and the various other branches of science, may be perfectly ignorant of this agency. The skill necessary for its use, is not to be learned from ordinary works on human physiology or medicine. This, if we may so speak, is a science by itself; it has its peculiar laws,—is different from all other subjects in so many respects, that a man does not become qualified to operate merely by possessing good health, and a desire to do good. He should become familiar with the nature of the sympathetic system, and study the different susceptibilities, *sympathies* and *antipathies* of the living

body. He should perceive how it is, that the mind and these susceptibilities reciprocally affect each other. A thorough knowledge of Physiognomy and Phrenology are great helps, though not indispensable. But there is what may be called an *aptness* for this work, which enables the skilful operator to adapt himself to the condition, idiosyncrasy, and peculiar views of his patient, and by which he causes different agencies and circumstances to contribute to his assistance, in his attempts to relieve suffering humanity.

7. *Balance of power.* The operator may be either male or female; but in what would be understood by nervous or *sympathetic power*, the operator should be *superior* to the patient. We have seen, that positive effects are produced by establishing a positive relation between two bodies that differ in temperament, or some other physical qualities which render one susceptible to an influence from the other. Of course, therefore, the stronger the operator may be in all those qualifications which give an influence, either physical or mental, over others, the better for this agency. And so, also, when the system of the patient is enfeebled by disease, or worn down with suffering, it forms a greater contrast with the power which is brought to bear upon it, and the results will generally correspond.

2. THE PATIENT.

1. *Temperament.* We have already seen, that everything, as it were, depends on the *susceptibility* or *sympathetic temperament* of the patient. True, there may be but few cases where some slight *relief* could not be given, by an experienced operator; but we do not know enough of this agency to induce the belief, that it may, at present, be considered a panacea for "all the ills that flesh is heir to." That different operators have succeeded in performing some very extraordinary cures, is true, and I have been successful in a few remarkable cases of my own; but yet we know but little of the laws of this agency. And this is saying no more than we might affirm of the *materia medica*. Who has been able to tell, why the same medicine does not produce the same results on different persons, and at different times not even on the same

person? Does not every thing depend upon the idiosyncrasy of the patient? And do we doubt the efficacy of any medicine, merely because it does not always produce the same effects, in the same time, upon different patients, or indeed upon the same patient?

There is a *peculiarity* in the temperament of those persons most susceptible. They generally partake, more or less, of what is understood by the sanguine, lymphatic, and nervous. Persons highly nervous, as it is called, are not the best subjects. Those in whom the above combinations seem to meet, are of what we should denominate a *sympathetic temperament*.

2. *Excitement—Quiet.* All nervous or mental excitement in the patient, as well as in the pathetiser, are decidedly unfavorable. The entire system should be in a state of perfect quiet. The mind should be unoccupied. There should be no anxiety about the process, or its results. The patient should be previously prepared, so that, when the operation is commenced, the mind may at once yield to its influence, without any opposing or disturbing influences.

3. *Sleep.* When a state of somnipathy follows this process, new responsibilities are imposed upon the pathetiser. In cases of sickness, experiments, merely, should never be attempted; nor should the patient be worried with questions. If he is properly managed, he will be able to describe his own case; and after some experience, that of others, without much difficulty.

The time during which the sleep may be continued, must be determined by the case. No definite rule can be given—the operator should use his own judgment. A few hours, daily, may be sufficient.

3. TIME AND PLACE FOR OPERATING.

1. The patient and the operator should not only be in a state of perfect quiet, but the process should be commenced where they will not be likely to be disturbed. They should not be entirely alone: one or more judicious friends should always be present, when the operator and patient are of different sexes. Strangers should not be admitted. To the presence of persons who are disagreeable to the patient, or who

are obstinately set against the agency which is to be applied for his relief, there are *insuperable objections*. Deleuze, Dr. Rostan, and the most intelligent operators in every part of the world, have united in bearing this testimony.*

No conversation should be carried on within hearing; and things should be so arranged, that persons may not be passing in and out of the room, during the sitting.

2. The sittings should be protracted from thirty minutes to one hour, and should be had, as near as may be, at the same hours every day. They should be repeated as often as once a day; and when continued for thirty minutes only, they may be repeated a number of times during the twenty-four hours.

4. PROCESS OF PATHETISING.

Different effects may be produced in various ways on highly susceptible subjects; or, after the relation has been sufficiently established between the pathetiser and patient; and it should be remembered, that it is by no means necessary to produce sleep, in order to relieve one from disease or pain.

The patient should be comfortably seated, where the head may recline without fatigue. He should then be directed to elevate his eyes, and immovably set them on something stationary, with his *mind* fixed upon the *CERTAINTY of the result which you design to produce*, whether it be sleep, or the relief of bodily pain. The longer and the more steady his eyes and mind are kept thus united, in *anticipation* of the designed results, the better. And in some subjects, the effects are increased by their standing up, either against the side of the room, or near a chair or sofa, where they may easily sit down if they wish to do so.

At other times, the effects are very much increased if the operator sits by the side of the patient during this process, and holds one of his hands; or if he give him a piece of steel, or any substance not offensive, which the patient should hold in his hand.

* "There is," says Dr. Georget, "a very essential precaution to be taken by those who wish to make useful experiments. It is, to avoid surrounding one's self with dishonest and incredulous persons. I had frequently to complain of them; and my somnambulists have experienced great troubles from them, and, almost always, serious accidents." — *Phys. Nerv. System*, vol. 1, p. 270.

In this manner I have put a room full of persons to sleep at once, and believe I could operate successfully upon twenty at one time, without the least inconvenience to myself. The old method of staring the patient in the eyes, is highly objectionable, especially when the parties are strangers, and of the different sexes; and the extreme *mental* efforts put forth by some operators, are as unnecessary as they are sometimes ludicrous. Indeed, I am confident, that the manner of passing the hands about the persons of some patients, and gazing them in the eye with such barbarous tenacity, has often prevented the anticipated results; as I have often induced sleep in a few minutes by the above process, in persons, where the other method has failed after a dozen trials.

Of course, the *attention* should not be directed from the patient, any more than the patient's attention should be directed from the process used for inducing sleep, or the relief of pain. And the sleep, and results, will become more and more sympathetic as this process is repeated, as it must be for a length of time before the susceptibility will be found sufficiently developed to be controlled, *merely*, by the will of the operator.

For increasing the sympathy, and also for relieving pain, the passes may be made, or the hand applied in the following manner. Standing by the side of the patient, when reclined or seated as above directed, the operator should place one hand over the whole of the forehead, from the super orbiter plate upward, and the other directly above it; or, while you hold the right hand over the frontal region as above, place your thumb and middle finger directly back and a little below the centre of the organs marked by Gall as *Caution*. If you wish to vary the method, stand directly behind the patient, and place your middle fingers on the points above named: by this process alone sleep is often induced, and no other means will, in some cases, succeed so well in producing a state of mental tranquillity. When the patient seems to be more or less subdued, pass your hands gently from the coronal region down the sides of the head, extending them off in a circle to the top of the head again. And, if you wish, you can pass

your hand slowly from the head down, inside his arms and hands, and extend them off and in a circle again, to the head, as before.

As a sound state of somnopathy rarely follows the first sitting, the process should be repeated till it is successful. When the sympathetic relation is once established, the patient will sink into a state of sleep, or wake up, merely by the *direction* of the operator, and frequently without any direction, if the patient has a distinct apprehension of what he supposes the operator's wishes are.

To wake up the patient by the passes, place one hand over the back part of the head, covering from the portion allotted to Philoprogenitiveness down over the cerebellum; and with your other hand place your two fingers upon Causality, or pass the hand *quickly* upward, over the frontal region, as if you wished to brush away something collected there. Or, standing in front of him, put your thumbs over his eyes, and pass them upward quickly over his forehead. Put both hands upon the sides of his head, and pass them upward and off quickly; and pass them from his hands, upward, and along the arms. These processes should be continued till he is perfectly relieved.

For the relief of local pain, the hand should be held and passed gently over the part affected. To cure the headache, let the patient lean his head back, so as to rest it firmly in your hand, your hand being sufficiently low to cover the cerebellum. With your other hand, make the passes down and over the forehead and temples. If the pain is in the frontal region, cover the whole of the occipital, or those portions allotted to Approbativeness, Self-Esteem, and Firmness. For hypochondria and nervous derangements generally, the passes should be made, more or less, over the portions marked for Ideality and Sublimity. In all cases of fainting, languor, &c. the hands should be held upon the occipital region of the head. Many nervous difficulties may be perfectly relieved, by simply connecting the process of inducing sleep, with an anticipation in the mind of the patient of the certainty of the cure.

5. CAUTIONS.

On no account should the pathetiser ever become excited or *alarmed*, while operating, and especially while his patient is in a state of somnipathy.

If it be found impossible to wake him up, let him alone :— he will come out of it in time, if left to himself.

Sometimes patients, after being rendered highly susceptible, involuntarily sink into a state of sleep. This may be prevented by the fixed *will* and direction of the pathetiser. Direct the patient, when asleep, never to sink into that state again. If this be not effectual, leave him to himself. You should never meddle with a patient, whom you find it impossible to control.

All excitement should always be removed, before the patient is waked up; and great care should be taken to remove the excitement from each organ in which it may have been produced. I have known mischievous results to follow these excitements : they should therefore be attempted with great caution, and only for good and justifiable purposes.

Nor should the stomach be loaded with food, during the excitement of alimentativeness. These excitements, of course, are morbid, or beyond the demands of nature, and should be continued but a few moments at a time.

No liberties should be taken, or allowed, with the person of a somnipathist, which he would not consent to, when awake. It is a great injustice and breach of confidence, when your patient, after having trusted his life to your care, while in a state of unconscious slumber, wakes up and finds his flesh pricked with pins, and mangled in various ways, to satisfy the incredulity of unreasonable minds.

It is quite common for those but partially familiar with this subject, to recommend and urge their friends and others to attempt the production of the somnipathic state, merely to gratify their curiosity, or to satisfy themselves of its truth.

This is certainly wrong; I have seen many mischievous results from those attempts. When any injury follows the use of medicine which has been administered by an intelligent physician, people do not set it down to the discredit of

science, but we infer from such cases, the necessity of care and extensive information, by which such injuries may be avoided. Or, if the mischief be done by the ignorance of the practitioner, he is blamed, of course—and punished, it may be, by the tribunals of justice.

But it is still worse when mischiefs follow from mismanagement of pathetism. From the deep-rooted prejudice which everywhere prevails against this agency, all the mischiefs which may result from its misuse, are attributed to the agency itself; and thus the greater injury seems to be done to truth, than in the cases above stated.

I was recently called to the following case. An operator had succeeded in putting a person to sleep. The attempt had been made a number of times, and from curiosity merely.—But, finally, he found it impossible to remove the sleep, and convulsions and insanity followed. I have known a number of cases of this kind. The physicians and friends, of course, lay all this mischief to pathetism. It should be attributed to the *ignorance*, and in some cases to the imprudence of the operators.

The most intelligent may sometimes fail; and if these are not always successful, it should caution others never to attempt to produce a state of feeling in another, which they *may* find themselves unable to control. If you have health, and a heart for this work, and have made yourself familiar with its laws, *commence with the sick*: let your efforts be made not to produce the sleep, nor any of its phenomena, but to relieve the suffering. Evil could scarcely be anticipated from such attempts provided the motive were what it should be, and the process were agreeable to the patient.

Pathetism has to do with the sympathetic system, not of the operator and his patient merely, but with the nervous *sympathies* and *antipathies* of every other person present. And, the success of the operator's efforts must depend, more or less, on the state of feeling with which he is surrounded. And, it is an admitted law of this subject, that no one should ever attempt to operate on another, merely to satisfy an idle or a wicked curiosity. The motive should always be the re-

lief of the patient : or if it be for the benefit of the science, the attempt should be made agreeably to the rules which the subject itself prescribes for its own management.

I do not disapprove of all exhibitions of the sleep ; there are occasions enough for all benevolent and scientific purposes, when this phenomenon may be seen and tested, without exposing patients in the way they have been, by many heretofore. Indeed it is a subject which every one should investigate for himself, and this all may do without giving countenance to its abuse by exhibitions, in the way some of them have hitherto been managed.

CHAPTER IX.

PHRENOPATHY.

Phrenopathy, from *phrenis*, *mind*, and *paschos*, *to feel, experience*, to be *acted upon*. I have already informed the reader as to the reasons for applying this term to those operations on the human brain, by which we are enabled to control the cerebral organs through the agency of pathetism. A term is needed for the purpose of designating those operations which control the *mental* functions; and this is as suitable as any other, if we choose to use it for this purpose.

But, before we come to the distinguishing principles of Phrenopathy, it may be desirable that the reader should have some general account of the brain and its functions, as far as they seem to have been determined, heretofore, by the labors of previous ages. Of the discoveries of the immortal Gall, it is not my design to speak here. The science which he had the honor of founding, though still in its infancy, has well nigh lived down the ridicule and opposition which were formerly waged against it. Had it not been true—had it not been founded in fact—the name, talents, and wealth, which have been arrayed for its annihilation, would have proved successful long ago! But what a glorious triumph has Phrenology achieved over the world, in arms against it! Its claims, as a science of the first importance, are at the present time generally admitted, and the best minds in the civilized world are convinced of its truth. Not a class of the learned can be mentioned, not a party, in religion, medicine or politics, but among whom we shall find numbers who firmly believe its truth; and many who will acknowledge themselves indebted to its *light*, as much, or more, than to any other science, for the knowledge they have of themselves

or the mental character of others. Indeed, we do not believe that any other science could boast of men higher in the scale of intelligence or learning, than are now the firm advocates of Phrenology.

To Dr. Gall, also, belongs the honor of shedding more light on the anatomy of the human brain, than, probably, to any other man who has ever lived; and it would not be difficult to show, that numbers have since written upon the physiology of the nervous system, without giving that distinguished man due credit for the obligations they were under to his previous discoveries.*

All that can be attempted here, will be, merely to give some general observations on the anatomy and functions of the encephalon, by which the reader may be the better prepared to apprehend the principles of Phrenopathy.

1. THE RELATION OF THE ENCEPHALON TO THE HUMAN BODY.

We have already seen, that fœtuses have been formed without any brain. Of course, they could not live long. Other cases have been stated, where the whole of the cerebral mass has been let out of the cranium, for the purpose of facilitating delivery, and yet, life has remained some hours afterwards. The fact, that fœtuses are sometimes born without any brain, or spinal chord, does not, certainly, seem to favor the assumption, that the brain is the point from which all the nerves *originate*. It is far more probable, that the nerves of sensation, properly speaking, originate or commence in the extremes of the system, and from the surface thus transmit impressions up to the sensorial centre in the brain.†

That vitality does not depend so much upon the brain as

* Spurzheim exposed himself to this censure, as the reader will see by consulting Dr. Elliotson's *Human Physiology*, 5th London edition, 1849, 8vo., p. 1147.

† Dr. R. Nelson states, that on dissecting two moles, he found the optic nerve did not extend to the brain. If these animals do not use the eye, there is no necessity for connecting the eye with the brain.—On the same principle of nature, we find the fish in the celebrated Mammoth Cave in Kentucky, have no eyes—simply because they have no use for them.

many have supposed,—and, indeed, that all the functions of the vital or animal economy may be carried on, for a time, without it, is further proved from the fact, that all the other parts of the body are formed, and considerably developed, even before the brain and spinal chord have assumed any degree of consistence, more than the white of an egg, and, consequently, are utterly incapable of any functional power. Magendie mentions the case of a girl, who lived to the age of eleven years, with the use of her senses, and with feeble voluntary motion, but sufficient for her wants and progression. After death, no cerebellum nor mesocephalon could be found. In 1673, M. Duverney removed the cerebrum and cerebellum from a pigeon, and found that the animal lived for some time, and searched for its food. Mr. Lawrence saw a child four days old, without any encephalon except a mere bulb, which was a continuation for about an inch above the foramen occipitale from the spinal chord. Its breathing and temperature were natural.* Mr. Ollivier saw another case of the same deficiency, and the child not only cried and sucked, but squeezed with its hand; and another is mentioned by Lollémand, which lived three days.

Dr. Kaan, a century since, observed a frog move all its limbs half an hour after its head had been cut off, and even after its body had been divided in two. Fontana declares, that after removing the brain of a turtle, and entirely emptying the cranium, it lived six months, and walked as before. Mr. Flurens took both hemispheres from a chicken, and yet it walked, flew, shook its wings, and cleaned them with its beak, as before. A viper, after decapitation, moved towards a heap of stones where it had been accustomed to hide itself. Rede extracted the brain of a land tortoise, and it lived and walked for six months afterwards. Magendie says, “it is droll to see animals skip and jump about of their own accord, after you have taken out all their brains, a little before the optic tubercles. New born kittens tumble over in all directions, and walk so nimbly, if you cut out their hemispheres, that it is

* Med. Chir. Trans. vol. v. p. 166.

quite astonishing." And he speaks of a hedgehog, which gratified him in this way two hours after the operation !

We are told, that in fœtuses full grown, without any encephalon, or even spinal chord, the circulation, nutrition, secretions, &c. proceed *equally* as in others, which, besides a spinal chord and ganglia, possess also a brain. These facts would seem conclusive against the supposition, that the brain is a kind of galvanic battery, which supplies vitality or nervous power to the other portions of the system. As it is the last part formed or matured, it is reasonable to suppose, that its relation to the body is secondary, when compared with the heart and other organs in that region. It is, certainly, a law of nature, that those organs, in living bodies, should be first produced and developed, whose functions are most essential in the vital economy ; and hence, we find the formations commence with the solar plexus, the ganglia of the dorsal region, together with the heart and blood-vessels. And if what has been offered in a preceding chapter be correct, with regard to the peculiar functions of the ganglionic system, we may see why it is that there seem to be more ganglia in the dorsal and lumbar regions, than have been found in all the other parts of the system ; and it will explain a number of phenomena which have hitherto remained in the dark. As, for instance :—

1. That the sensation of *sympathy* is generally felt in the region of the solar plexus. When this feeling is powerfully excited, the hand is instinctively placed upon the epigastrium.

2. That the five external senses are sometimes, by disease, transposed and located in this region. In cases of catalepsy and trance, persons have been unable to hear or see, except from this region.

3. In many cases of somnipathy, I have been unable to cause the patient to see or hear any thing, except from the pit of the stomach.

4. A slight blow upon this region has frequently occasioned *instant death* ; while severe blows upon the head, or mutilations, or even the destruction of the brain, did not immediately destroy life.

5. These ganglia, and, indeed, the ganglionic system, as I

have stated before, have been found fully developed in those fœtuses born without a brain or spinal marrow. Hence it is plain, that the animal or vital functions can be carried on without a brain, but not without the ganglia and solar plexus.

6. It explains the reasons why the heart continues its functions after the head has been struck from the body. Dr. Bortels declares, that when he opened the chests of six men, in 1826, immediately after decapitation, near Marbourg, he found the hearts beating regularly for half an hour afterwards; and, when languishing, they were excited by irritating the great sympathetic nerve,—and yet, irritation of the spinal chord had no effect on the heart whatever, though it did affect the muscles of the trunk. And he further informs us, that on dividing the cardia plexus, the action of the heart ceased instantly.* And after the cerebrum and cerebellum of a man had been entirely blown off by an explosion of firearms, the circulation and respiration continued for more than half an hour.

There are many plausible reasons for supposing, that the different parts of the system are commenced, in the process of formation, independently of each other; and hence it is, that fœtuses are born with parts wanting or redundant.†

2. HEMISPHERES.

It seems necessary that we should take cognizance of the division of the encephalon into two brains, as it were; for, like the organs of animal life, it is double, and hence the impressions made upon it, though they are, in fact, double, are perceived as one, the same as the double impressions made upon the eyes and ears are one. Hence, all the mental functions must be double, so that when we speak of an organ, the term includes two, one in each hemisphere of the brain. This accounts for the fact, that when one side of the brain is sometimes seriously injured, the effects do not appear in the mind. And it will be seen from it, also, how careful we should be in performing experiments in Phrenopathy, as, if the fingers are

* Bichat says he had observed no effects on dividing the cardiac filaments.

† We have accounts of parts of fœtuses found in the bodies of males, one nine, and another some twenty-six years of age.

not placed on precisely the same organs on both sides of the head, there must, of course, be confusion in the results.

2. DECUSSATION.

The nerves extending from the brain to the body, or from the body to the brain, cross each other in the medulla oblongata, so that one side of the brain answers to the opposite side of the body; and though cases do often happen where the opposite side of the body is affected from that of the head, as in paralysis, yet this does not always occur. We have examples of ague, affecting one entire perpendicular half of the system; and of persons who sweated in one entire perpendicular half; and of persons becoming pale and emaciated in one entire perpendicular half, while the other remained healthy.

3. SECTIONS OF THE ENCEPHALON.

1. *The Cerebellum.*

Though this portion of the cerebral system seems to be a distinct brain of itself, and therefore peculiar in its functions, it is usually considered as a part of the cerebrum, or generally in connection with it. The light which Phrenology and Venesection have shed upon its functions, would seem to have fully settled this question beyond all possible doubt; and yet, we have recently heard of attempts, under the name of "Neurology," to prove that Gall, Magendie, and a host of other anatomists, whose labors have so much enlightened the world, were most egregiously mistaken in their views of the cerebellum, and that this portion of the cerebral system, instead of having any thing to do with the sexual propensity, is appropriated principally, or wholly, to the function of nutrition.

To give any considerable proportion of what might be said, showing the real functions of this organ, would fill a volume by itself. The following may be taken as the summary of what seems, now, to have been generally demonstrated, by Phrenology and pathological investigations. It is from Dr. Jamison, a physician of high distinction in England:—

"Since I became acquainted with the science of phrenology, some years ago, my attention has been directed to the condition of the cerebellum in those individuals who have consulted me for impotence, and in others. I have attentively ob-

served and studied a great number of cases, and am led to regard the following conclusions as correct. I hope their publication may have the effect of directing medical practitioners more closely to observe the undoubted connection which exists between the state of the genital organs and the cerebellum, and a disease which in its various degrees is much more prevalent than is commonly imagined, and is the cause of a great many evils.

1. The sexual passion has its seat in the cerebellum, and is energetic or the reverse in proportion to the size and tone of this organ.

2. Smallness of the cerebellum, much inequality of its lobes, and deficiency of its tone, are the cause of impotence.

3. When the cerebellum is very small, impotence is permanent.

4. When the cerebellum is small, it soon suffers in tone if made to preform its functions with ordinary frequency.

5. When one lobe of the cerebellum is small and the other large in a man, it is sometimes the case, that he, at intervals distant in proportion to the size of the large lobe, performs the generative act imperfectly, until the large lobe which had been exhausted, recovers its tone.

6. When the cerebellum is very large and is much exerted, as it usually is in such cases, it becomes impaired in tone, and impotence is sometimes the result; but the generative act may be well performed by a large cerebellum, even when impaired in tone.

7. Average endowment of the cerebellum is most favourable to permanent potency.

8. When the cerebellum becomes much deficient in tone, if it be not soon cured, the spinal marrow and its nerves, the organic nervous system, the intellect and moral feelings, are successively debilitated.

9. Deficiency of tone of the cerebellum in the male or female is often transmitted to the offspring.

10. Impaired tone of the cerebellum is the cause of spermatorrhea.

11. The size of the genital organs exercises no influence on their activity or vigour; they are often inert when large, and vigorous when small.

12. The father of a monstrosity, an account of the post-mortem examination of which I published some time ago, had the cerebellum small and debilitated, and had also spermatorrhea; he was permanently weak in the genital organs, and was the means of making me acquainted with many similar cases, and their peculiar symptoms. His wife became jealous and went mad, in consequence of believing that

he was unfaithful, and that what was the result of debility, was caused by dislike of her. She died in a lunatic asylum. These facts, in connexion with remark No. 8, render it probable, in my opinion, that the subjects of abnormal organization are the products of parents whose generative apparatus was diseased, and general health consequently impaired. I think the condition of the cerebellum in the parents of monstrosities should be observed.

13. Permanent or frequent impotence, or even continued partial debility of the genital organs, in men who have large self-esteem and destructiveness, and benevolence or conscientiousness not very large, often produces strongly selfishness and malignity; and also cunning and falsity; for though secretiveness should not be large, it is so much exercised in these cases to conceal the symptoms of their disease and preserve the reputation of virility, that it operates as if it predominated in size. This is in accordance with the remark of Dr. Cox, "that it seemed to be a law of the human constitution, that when any of the faculties is pained or disagreeably active," destructiveness instantly comes into play. Here amateness is mortified, and self-esteem and love of approbation disagreeably active, and destructiveness becomes consequently excited, secretiveness being active also, malevolence, cunning and falsehood, result.

14. Over exertion or exhaustion of the cerebellum robs adhesiveness and combativeness of their power, and thus causes cowardice.

15. Whatever exhausts the power of the constitution, seems not only to diminish the power of combativeness, but also to stimulate cautiousness.

16. In some men an activity of the cerebellum greater than what we would expect from their temperaments and developments, may exist for a long time without producing impotence; here it seems to appropriate more than its own share of the nervous energy of the system; the other organs of the body suffering a diminution of power, apparently that the generative apparatus may obtain an increase.

17. The cerebellum is in general too much exercised in the married state.

18. When the cerebellum is too much exercised, no matter what the size of it may be, it becomes impaired in tone.

19. Men and women who have the cerebellum much below the average size should not marry.

20. Impotence is curable in all cases but where the cerebellum is very small and disorganized.

21. Fluor albus is caused by deficient tone of the cerebellum in many cases.

22. Deficient size and tone of the cerebellum in males or females is a cause of want of liveliness, and sometimes of melancholy and madness.

23. Disease of the cerebellum is often the real cause of absurd eccentricities.

24. The treatment of impotence should always be directed with a view of its origin from the cerebellum."

I doubt the correctness of the conclusions numbered 2 and 20, without some qualification, as I am convinced that impotence is often caused by the sameness in the temperaments; and if so, it cannot be cured, even where there is no difficulty in the cerebellum.

2. Base of the Brain.

Facts are at hand, also, to prove that the cerebellum and lower portions of the cerebrum, are particularly related to the muscles and limbs. Indeed, it would not be unreasonable to infer this fact, from what is known of the functions appropriate to other portions; for, as the upper and frontal organs answer for intellectual functions, we might suppose that the lower portions would hold relations with the animal and lower parts of the system. And hence we find, that a severe blow upon the lower and back part of the head, rendered a man paralytic in his arms and legs. And it may be noticed, that paralysis of the lower part of the body, even when arising from lesion in the corresponding portions of the brain, does not affect the mental functions at all.

3. Coronal Region.

It has long been known to Phrenologists, that the lower the organs in the head, the more their functions corresponded with the propensities common to the animal creation. And experiments in Phrenopathy have tended to show, most conclusively, that one pair of the same organs are more elevated and refined in their functions than the pair below it. Thus, I find, the first pair of Amativeness are common to animals; the pair above appropriate to intellectual enjoyment. The lower organs of Comparison take cognizance of things, the upper ones compare ideas; the lower organs of Causality are exercised on things, the upper on metaphysical subjects. And

it is a remarkable fact, that from mere animal instincts, which relate to the preservation of life, and selfish gratification, the organs not only ascend in the head, but also in the nature of their functions, till we come to the highest, which take cognizance of our relation to the *Deity*, and a future state, not excepting, perhaps, one which is appropriate to calculating, or perceiving future contingencies!

4. *Frontal Region.*

Here we find those organs which are appropriated to science, intelligence, and knowledge of men and things, and which distinguish men from all other living animals. And, not only so, but the size of some of these organs (others in proportion) distinguish the intellectual powers of one mind from another.

5. *Occipital Region.*

In this portion of the brain we find the balance of the frontal region. A blow upon the lateral portion of the occiput, has been known to restore the intellectual functions which a previous blow upon the opposite region in the forehead had destroyed. Here are those organs whose functions control the muscles, and give the power of physical resistance.

The connection between the brain and stomach has already been alluded to. The effects of a blow on the head, or from swinging, or turning round, or the motions of the vessel at sea, are well known. These arise in the stomach, from sympathy with the brain. And, in like manner, the brain is affected by the state of the stomach, as in cases of indigestion, poison, and intoxication.

The pathology of the heart is, in many cases, intimately connected with the state of the brain. Hypertrophy of the heart disposes to apoplexy.* Dr. Hudson, of Navon, has published a valuable paper, showing, most conclusively, that delirium is connected with, or produced by, certain states of the heart in fever. The excitement of some of the cerebral organs increases the action of the heart, as for instance, fear or ex-

* An able paper on this subject may be seen in the *Dublin Med. Jour.* May, 1840.

cessive joy. The same is true of the liver and lower intestines. I have known cases, where intense mental excitement has produced action of the kidneys and defecation.

4. EXCITEMENT OF THE SEPARATE CEREBRAL ORGANS BY EXTERNAL APPLICATIONS.

It was long since demonstrated by Professor Muller, that some of the organs of external sense could be excited by galvanism. He says,

“The stimulus of galvanism *excites, in all the organs of sense, different sensations in each organ*, namely, the sensation proper to it. In the eye, a feeble galvanic current excites the special sensation of the optic nerve, namely, that of *light*. In the auditory nerve, electricity produces the sensation of sound. It has not, at present, been much observed, whether peculiar smells are produced by the application of galvanism to the organs of smell. Ritter, however, has perceived them; and it is a known fact, that the electricity excited by friction, gives rise to the smell of phosphorous.”

This is, probably, the first account ever published of any excitement of the cerebral functions, by direct external applications to any part of the system.* Dr. W. Phillip declared, many years since, that any substance, in its nature stimulating, applied to the brain about the origin of the nerves, excites contraction of the muscles; and a substance, in its own nature stimulating, excites the heart and capillaries when applied to any part of the brain or spinal chord, if applied to a considerable portion of it.

And, considering how long these facts have been before the world, and, also, what has been known for years, of the agency of pathetism, it is marvellous that the susceptibility of the cerebral organs to this influence was not tested many years ago.

Bichat describes a series of experiments which demonstrate, as he thinks, that cerebral action does not directly interrupt the organic functions. He says:—

“Acephalous fœtuses, while in the uterus, possess an or-

* I quote from Walker's Pathology, p. 131. The extract from Muller first appeared, I believe, in 1834.

ganic life altogether as active as the most perfectly formed fœtus; indeed, they sometimes discover, at birth, preternatural proportion of increase. This I have had an opportunity of witnessing in two fœtuses of this description, that were brought to my amphitheatre. Not only was the face better developed, as is always the case, because the cerebral vascular system being void, that of the face is proportionably increased; but all the parts, those of generation particularly, which generally before birth are scarcely evolved, displayed a correspondent plenitude of development. Nutrition, &c., are therefore as active in these as in ordinary cases, though the cerebral influence is actually wanting.”*

The way is now prepared for some account of the origin of those experiments upon the human brain, which have given rise to the term Phrenopathy, and the principles by which it is distinguished from Phrenology, Cranioscopy, and the former known results of Pathetism.

More than twenty years ago, my mind was interested on seeing persons very strangely affected by religious excitement, when they were said to “lose their strength,” and swoon away as in cases of catalepsy.

This phenomenon led me to suppose the existence of laws which governed the nervous system, which had not been understood, and which afforded the only true foundation which could be assigned for any thing real which had ever taken place under the name of Mesmerism. Accordingly, I determined on an investigation of this subject, for the purpose of sifting it to the bottom, and ascertaining how far the nervous system could be affected by pathetism.

In the New-York Watchman, for October 23, 1841, of which I was then editor, I published *the first account that ever appeared*, as far as I know, *of this process of operating upon the separate cerebral organs*. That account did not appear till more than two months after I made this discovery, which occurred as it is there stated. I had been engaged in collecting facts on various “MENTAL PHENOMENA;” and un-

* Bichat further shows, what I have assumed in a preceding chapter, that the ganglions do not transmit the cerebral action, (except, it may be, *sympathetically*,) inasmuch as the nervous system belonging to these bodies is perfectly independent of the cerebral nervous system.

der this head, was then publishing a series of articles, showing the "influence of the mind over the nervous system." And, while preparing those articles for the press, I commenced a course of experiments in Pathetism, for the purpose of bringing out, in them, an account connected with the state of somnipathy; and hence that account was not published until it best fell with the other subjects under examination. The first operation of the kind was on the 5th of August, 1841, and my published account of its *origin* made in the paper as above stated, and is as follows:

"If it has occurred to the reader, that there *might* have been some collusion in the matters detailed in our last, in regard to what was done by the somnipathist, we ask him to weigh, candidly, the following details, in some of which, it will be seen, deception was scarcely, if at all *possible*.

"As far as we know, the following *phrenological* tests were the first of the kind ever tried, in this or any other country; and as they did not originate with either of the parties concerned, the reader will not suppose that it would require a very large development of marvellousness in us, to believe that there was something extraordinary in these results. How far they may tend to demonstrate the truth of pathetism or phrenology, in the mind of the reader, will depend altogether on his belief that there was, really, no deception in either of the persons concerned.

"I had noticed, as before stated, that the limbs of the patient could never be made to obey the will of the operator, when the brain was not pathetised, and having tested this fact a sufficient number of times to satisfy myself that I was not deceived in this matter, *it occurred to me, that particular portions of the brain might be operated upon in the same way.* I therefore, at the sitting last mentioned [Aug. 5, 1841], requested the operator, while the patient was asleep, and playing at the piano, to reverse the passes over those portions of the brain appropriated by phrenologists to the organs of *tune*. He did so, *after* I had designated the places to which I referred. The passes were reversed a few times, simply with his thumbs. She was now ordered to play; but she replied, that '*she could not think of the tune*'! She was repeatedly urged to play, but uniformly made the same reply. Satisfied, as I was, that there could not have been *any* collusion in *this* experiment, the reader may easily imagine how deeply I was interested by it,—demonstrating, as it did, the truth of phrenology in my own mind, beyond the shadow of doubt. The same

thing I have since done, and seen repeated, on different patients, and in various ways, and the results have always been the same."

Though I have never attached so much importance to this discovery as some others seem to have done, yet I am thus particular in stating the dates connected with the results of my cerebral experiments, that, if any account of a similar *process* of operating should have been previously published, I may not seem to attempt a monopoly of what belongs to another; as, since the above account was first published, it has been said that others, in different places, had operated in a similar manner; and, though, at the time, I had never heard any thing of the kind, as no account of the *process* of operating had been published, previous to my own, yet I have no doubt but the same thing may have been done perhaps, some years before.

Dr. Cleaveland, of Providence, R. I., informs me, that, in 1837, he used this same agency in exciting some of the mental functions, though he did not apply it in the same way. Nor is it unreasonable to suppose that the same process of operating may have suggested itself, about the same time, to different persons, both in this country and England. Dr. Buchanan, of Louisville, Ky., affirms, that he performed similar experiments in the spring of 1841, by means of a "galvanic fluid," on persons in the waking state. And in a work entitled "Sketches of Buchanan's Discoveries," published by himself in 1842, professedly to give an account of his discoveries, he says:

"I determined to excite the different portions of the brain *by a galvanic or galvanoid fluid*, and calling them separately into action, to watch the resultant phenomena; or by exciting them in myself, to enjoy at once a perfect consciousness of the nature of each faculty, and its organ. *In this attempt*, I have met with even a more glorious success than I had ever anticipated."

And then he adds in a note, page 10—

"I say NOTHING of my mode of operation at present, as that will be displayed hereafter, publicly."

From this, it appears that Dr. B. himself, in presenting the reports of his numerous experiments, tells us that *he had not*, and *WOULD NOT*, then, *reveal his method of operating*, or applying what he calls the “galvanoid fluid.” And those who have read his book, know that he does not disclose his *method of operating*; nor, indeed, has he published any account of it, that I know of, to this day. And I frankly confess, that I never could form a satisfactory idea as to what his peculiar method was,* till I heard his lectures in this city, in November, 1842. The truth is, we were deceived by his professing to have discovered “a *new agency*,” which he claimed to have “added to our therapeutic list,” (page 21); and his disclaiming, so explicitly, all dependence upon what had been called mesmerism. See his book, pages 55—62.

The origin of these experiments in England, is fully described by Dr. Engledue, in the report of his address before the London Phrenological Society, published in the Edinburgh Phrenological Journal for October, 1842. It is there stated, that they were first performed by a Mr. Mansfield, December 18, 1841.

The manner in which this process of operating seems to have been discovered by different persons, must be considered in the light of a coincidence, and which must go very far towards demonstrating the reality of that agency by which these results have been induced.

The discovery of what I called the “sympathetic points,” or the susceptibility of the mental organs to the influence of pathetism, when the hand or fingers are applied, not to the head, but to any portions of the face, neck, trunk, limbs, fingers, &c., was made on the 5th of January, 1842, and published in the Watchman on the 29th of the same month. On the 12th of February, 1842, I also published in the same pa-

* Nor will the reader attribute this to our dulness of apprehension, we think, if he has ever read the Doctor's book. And the editors of the Edinburgh Phrenological Journal, it seems, were equally dull; for in that work for October, 1842, they speak of having received an account of Dr. B.'s discoveries, from himself, (the same, probably, published in his book, page 80,) but which, they say, did not *make it appear* what his method of operating was, otherwise than his *disclaiming mesmerism*.

per, an account of what I denominated the sympathetic *conductors* of the human system, whose functions I supposed to differ from those of the nerves, both of motion and sensation. And about the same time, I arrived at the conclusions stated in the following theory, in relation to the laws which balance the organs into "*positive and negative*," thus making one *opposed* to the function of another; but no *distinct* account of this fact was published, till that which appeared in the Watchman of March 26, 1842.

Besides the principles generally involved in my theory of Pathetism, I consider the following as having been sufficiently demonstrated, and settled, so far as this agency is concerned, in proceeding from, or influencing in any way, the different faculties of the human mind.

5. THEORY OF PHRENOPATHY.

I.

That the Cerebral system is appropriated to those functions which constitute *Instinct*, *Intelligence*, and *Reason*.

II.

That the Intellectual powers depend upon the size, *cæteris paribus*, and *proportional* developments of the different cerebral organs.

III.

That these organs are susceptible to the control of Pathetism, by which their action may be separately suppressed or excited, at the will of the operator, by manipulation merely.

IV.

The degree of their susceptibility depends on the developments and the state of the sympathetic system; and the contrariety between the temperament of the operator and the subject.

V.

That the mental functions may be separately controlled, by applying the fingers, or other appropriate agencies, directly

over the organs in the head, or to different sympathetic points in the face, neck, limbs, &c. of the entire system.

VI.

That the cerebral organs exist in pairs, and corresponding groups in each hemisphere of the brain, and their functions are balanced in opposition to each other.

VII.

That this principle of antagonism is not only common to all the cerebral organs, but it extends to the functions of organic life, and by it all changes in volition and motion are made.

VIII.

That the cerebral organs hold such relations to different parts of the entire system, that they reciprocally affect each other.

IX.

That this connection is kept up between the mental organs and the muscles and nerves of the face, and thus is laid the foundation for all that may be known of physiognomy.

X.

That the different mental and animal functions are controlled by sympathetic and antipathetic laws, which may extend their influences from one organ or from one person to another, by the nerves appropriated to these influences.

XI.

That these laws do, sometimes, give perceptions, without the use of the external senses.

XII.

That where the sympathetic system is sufficiently developed, any impression may be made upon it by pathetism, which comes within the range of human conception.

Having, in a preceding chapter, given some of the reasons which incline me against the prevalent notions with regard to the agency of a magnetic or nervous *fluid*, supposed to be

communicated from the hand of the operator, and *received into the cerebral system* of the patient, it may here be sufficient merely to add a few words, in confirmation of the foregoing theory.

1. Each of the cerebral organs may be excited, as we know, through the external senses; but, excitements produced in this way do not differ from those produced by pathetism, and hence I infer, that the immediate agency is the same. If there is no fluid communicated or received into the nervous system of the patient, when his Caution is excited by a mere sound, how does it appear to be by a fluid, when I excite that organ by merely placing my finger upon it?

2. The cerebral organs reciprocally affect each other, in the same person. Combativeness excites Destructiveness. Compassion excites Benevolence. But, is this done by a fluid? The sight often excites Combativeness: if this be done by a fluid, how comes it to pass, that this fluid, in passing from the optic nerve, or the organ of sight, to Combativeness, does not excite the numerous intermediate organs? Who can tell?

3. We have seen, that one must be the *subject*, and another the *agent* or operator. But the agent may excite the organs of the subject, either by touching him in any given point, or the subject may touch the agent, and the effects are the same. Now, when the subject touches, for instance, the organ of Benevolence in the head of the operator, and feels his own Benevolence excited, by what law is the influence *directed* to that organ, rather than any other? I humbly conceive, that the only rational answer that *can* be given here, is to be found in the foregoing theory. For, even if it should be admitted that a *fluid* is actually received by the patient from the operator, without the laws of pathetism we could not tell why it should excite one organ any more than another. If it should be said, that the fluid passes from the cerebral organs of the operator into the same organs in the brain of the subject, because organs affect their like, I answer, this is by no means clear. For we have seen above, that one organ in the same head excites others whose functions are entirely *different*.

4. It not unfrequently happens, that when a subject is under the operation of one person, his organs cannot be affected at all by any one else. But why not, if the brain actually receives a fluid from the hand of the operator ?

7. MENTAL ORGANS.

In concluding this chapter, it may be desirable that I should give some account of the bearings which this agency would seem to have in determining the number and location, as well as the functions, of the mental organs. From what has been already stated, it will be seen, that we cannot with safety depart entirely from the Gallian method of determining these questions. True, Pathetism affords new and extraordinary facilities for bringing out the mental functions, both in the sleeping and waking state ; but it cannot, for the reasons already stated, be depended upon for fixing the precise location of organs, to the entire exclusion of the old method. Nor are the difficulties obviated, by operating on persons in the waking state. We have seen, that in many cases it makes a decided difference, when the operator or patient knows, or anticipates beforehand, what the results should be. The best way, therefore, is for them both to be ignorant of Phrenology, and no questions should by any means be asked, or any thing said or done, which could give the subject any idea of the results which should follow any experiment in phrenopathy. Operators should always be aware, that patients are very *apt to anticipate* the results and thus train themselves into certain habits and susceptibilities *peculiar* to each case. For instance the operator makes a pass, or places his hand on the head of the patient, with the design of controlling the arm, and he says to his patient, 'Raise your arm.' Now this direction gives, at once, the *apprehension* of the effect *designed* to be produced ; and the patient, it may be, makes the effort, and finds it impossible to raise his hand. So, in exciting organs. The fingers are placed on any given portion of the head ; and if he says he feels a certain emotion, he may be easily led to associate that feeling with that place in his head ; but whether it be the appropriate place or not, must be determined by other things. I have seen heads both awake and asleep, turned 'topsy-turvy' in this way.

Nor are the accounts which patients give of themselves to be depended on, alone; for though they may be remarkably correct, in some respects, they do not prove to be so in all. The inference would at first thought seem to be well founded, that when you excite any emotion, by placing your fingers over a particular place in the head, that the corresponding organ must certainly be in that place. But this does not follow. You place your fingers on two points in the face, and excite the lungs; but the lungs are not beneath the surface touched in this case. And even if you should affect the mental organ, directly under your finger, the laws of sympathy might cause the results to *appear* from some other portion of the system. It should be remembered, that all these excitements, from extrinsic agencies, are more or less morbid; and, from the nature of the case, it must be exceedingly difficult to distinguish between these and the normal functions, or to tell, in each case, precisely how much is to be allowed for sympathy with other excitements in the system, of which we know nothing at all. Indeed, it should be known, that the phrenological organs, in some subjects, may be excited by touching any parts of the body. I have excited them in some patients, by touching the different *teeth*, in others by touching the different *fingers*, and the joints, as the *knees*, *elbows*, &c., and even the *toes* of the feet; nor is this any more unaccountable than that mirth, for instance, should be excited, by tickling under the arms or any other parts of the body.

The precise number of mental faculties it will probably be impossible to ascertain, as must appear, if we consider how difficult it must be, to distinguish between simple and compound functions, or the action of one and the combined functions of two or more organs.

The only way, therefore, for rendering this agency available in fixing the location of the organs, is the following:

1. Become familiar with the laws of sympathy and antipathy; and what the exciting or disturbing causes are, which may, in any case, interfere with their influences.

2. By comparing the results of different operators,

3. By induction and observation.

Proceeding in this way, I have set down the following additions to the discoveries of Gall, Spurzheim, Vimont, and others. True, I could have increased the number, *ad infinitum*; but cannot persuade myself, that if I were to put down *all* the manifestations which I have brought out from time to time, that it would be of any special service to science; as it is by no means perfectly evident, that all these manifestations are from the normal functions of so many distinct cerebral organs. For instance: is there a distinct organ for *thinking*? Are there distinct organs for *gaping*, *squinting*, *pouting*, for opening and clenching the *hand*, pointing the *finger*, turning the head, *nodding*, *whistling*, *deglutition*, *vomiting*, *shaking* the hand, *looking up*, opening the *mouth*, &c. &c. It has been affirmed, I am aware, that "*every fibre of the brain*" is a distinct organ, for some mental or physical manifestation, and that every actual, possible, or imaginable emotion, perception, apprehension, conception, or motion, mental or mechanical, is performed by a distinct cerebral organ. If so, there must be an organ for every letter in every alphabet; an organ for every word in every language; an organ for all kinds of food and drink; and, in a word, an organ for every science and every action which comes within the power of man! Who can believe this?

But it would seem, that this notion of the *infinitude* (so to speak) of the cerebral organs, has arisen from a want of attention to the nature of the *mental* functions. We find, for instance, an organ of *Causality*, or two if you please—one for *physical* or mechanical causes, and the other for metaphysical subjects; both together embracing, of course, all the causes of all things. Now it would be just as reasonable to assume the necessity of an organ of Causality, for every individual effect that has ever taken place, as it is to have one for every possible action or emotion. The truth is, no one can tell, precisely, what emotions or conceptions come out as the results of one *simple* function. We cannot tell, in many cases, how many organs *sympathise* with each other. And while I know that the same results may be produced from different subjects, by applying this agency to different parts of the system, I do not

see what is to be gained by putting down every manifestation as the function of a distinct organ. It seems to me, therefore, that the better way is, not to give up entirely the old method for determining the number and location of the cerebral organs. The chief assistance I have derived from this agency, has been in the development of their functions. Their location and precise number, must be left for time and observation to determine.

In the following list (first published in the *Magnet* for October, 1842), I omit the results I have noticed since that time, and also the old organs belonging to the system of Gall and Spurzheim. All I have found do not, materially, deviate from the locations marked by those distinguished men: they would seem, rather, to confirm them. The antagonist organs are also omitted in this enumeration, except in a few instances. They will readily be understood in each case, without a distinct specification.

1. *Dread of Death*. Fear of dying, unwillingness to pass through the struggle of death, in distinction from *Vitality*.

2. *Thirst*. In the group of Alimentativeness.

3. *Smell*. In the same group.

4. *Taste*. The power of distinguishing flavors, as distinct from Alimentativeness. Connected with Alimentativeness.

5. *Acquiativeness*. Disposition for water, as in bathing and swimming. Its antagonist function would seem to be *Hydrophobia*; nor is it improbable that there is such a *negative* organ, inasmuch as this disease does seem to have occurred spontaneously.* That the brain is susceptible of such an excitement, is certain.

6. *Desire for Money*. In distinction from Acquisitiveness.

7. *Grief*. A disposition to grieve, to sadness, melancholy, gloom, despondency, and despair. It is the opposite of *Joy*.

8. *Anger*. Indignation, the feeling of anger, with or without cause; and leading to opposition, resistance. In the group of Destructiveness.

9. *Ravenousness*. When excited, it gives an appetite for

* See Med. Chir. Review, Jan. 1841, p. 231.

gormandising snakes or reptiles of any kind. In the group with Alimentativeness.

10. *Desire for Hoarding up Treasures.* When excited produces Covetousness, as distinguished from Acquisitiveness, or the mere desire to procure, acquire. In the group with Acquisitiveness.

11. *Physical Fear.* Fear of pain, physical suffering. In the group with Caution.

12. *Discontent.* When excited makes one discontented with his condition, giving a desire for a change. In the family of Combativeness.

13. *Inquisitiveness.* A desire to pry into, to find out, what concerns the affairs of others.

14. *Desire for Precious Things.* Makes one fond of diamonds, jewels, &c.

15. *Love of Stimulants.* Gives an appetite for intoxicating drinks and hot substances, such as vinegar, pepper, &c.

16. *Desire for Protection.* Giving a sense of dependence, helplessness. Opposed to a sense of independence and safety.

17. *Praise.* Disposed to praise and flattery. Makes one delight in speaking well of those around him.

18. *Censure.* Disposed to find fault, to censure, criminate.

19. *Deception.* Gives the power of deceiving by falsehood.

20. *Disguise.* Gives the power of acting the hypocrite.

21. *Boasting.* Disposition for speaking in one's own praise.

22. *Aversion.* The feeling which says, "Go away, let me alone, do not trouble me, I do not like your company."

23. *Retribution.* Disposition for punishing one who has wronged or offended us. When excited, it purposes sly murder.

24. *Covetousness.* Tenacity in keeping money when it is once possessed. Acquisitiveness procures it.

25. *Contradiction.* Disposed to contradict, to cavil.

26. *Watchfulness.* Constant solicitude, anticipation of time and events.

27. *Jealousy.* Unwillingness to have any one else liked so well as self.

28. *Suspicion.* Inclined to imagine evil without any reason.

29. *Sarcasm*. Disposed to scornful, cutting expressions.
30. *Hatred*. The opposite of love, disposing, not merely to dislike, but to a feeling of malignant opposition.
31. *Courage*. Without fear, reckless.
32. *Parental Love*. Love of parents.
33. *Love of Pets*. Giving fondness for little animals, dolls, &c.
34. *Love of Gifts*. A love for things because they are gifts, keepsakes.
35. *Love of Enemies*. Gives a feeling of pleasure in forgiving injuries.
36. *Love of Country*. Patriotism, opposed to treason.
37. *The Will*. Giving a feeling of personal identity, and the power of self-determination. Wilfulness.
38. *Self-Confidence*. As distinguished from *self-esteem*.—Gives confidence in one's own talents, ability to accomplish.
39. *Dignity*. Giving a sense of propriety of conduct, removed from meanness, or servility.
40. *Ambition*. Giving a disposition for excelling in occupation, profession, talents, or character.
41. *Desire of Display*. Disposition to make one's self known, and to show off to advantage.
42. *Dread of Ridicule*. I once examined the head of an unmarried female, who had been tried for infanticide, in whom this organ was unusually large. She acknowledged to me, that she would rather die than be exposed to ridicule.
43. *Vanity*. As distinct from Love of Approbation. Giving an overweening conceit of one's self. When excited, the words are minced, and the head kinked back, in characteristic style.
44. *Modesty*. Giving a shamefaced, shrinking feeling, accompanied with blushing, and which leads one to hide or cover the face.
45. *Concentration—Recent*. The power of confining the attention to recent events or subjects.
46. *Concentration—Ancient*. Power of confining the attention to past events.

Concentration was first discovered by Spurzheim or Vimont,

but I put it down here, as I do a few others, because I suppose them to be double, as they seem to be from the results of my experiments.

47. *Perseverance*. Persistence against opposing influences. In the family of Firmness.

48. *Endurance*. Power of enduring.

49. *Responsibility*. Sense of obligation, responsibility.

50. *Industry*. Giving a disposition to industry, application to labor. Opposed to laziness.

51. *Comprehension*. Power of viewing things in masses, in their relations to one another.

52. *Calculation*. The power of calculating figures, as distinct from the organ of number.

53. *System*. Method, giving the disposition to be regular, doing things systematically and at the time.

54. *Conservativeness*. As opposed to Destructiveness.

55. *Harmony*. The power of combining and judging of the harmony of sounds, as distinct from Tune or simple melody.

56. *Things*. As distinct from individuals, or Individuality.

57. *Names*. There would seem to be a number of organs appropriate to language: one for words, one for ideas, and another for names.

58. *Light and Shade*. The power of distinguishing between them.

59. *Recent Events*. The recollection of recent events.

60. *Ancient Eventuality*. The power of calling up reminiscences.

61. *Comparison of Ideas*. There are two organs appropriated to Comparison, one takes cognizance of *things*, the other of *ideas*.

62. *Prevision*. The power of perceiving and calculating future contingencies.

63. *Generalization*. The power of extending the mind from particulars to generals.

64. *Analysis*. The power of analyzing, taking to pieces, viewing things in detail.

65. *Remote Causality*. As distinguished from Recent Causality. One enquires for the immediate, and the other for the *first* cause.

66. *Sense of Direction.* As distinct from Locality, or a mere recollection of places. This gives a recollection of the points of the Compass, and the relative position of one place to another.

67. *Desire for Seeing New Places.* Giving a disposition to travel.

68. *Desire for Seeing Ancient Places.*

69. *Sublimity and Ideality.* In the portions of the brain where these organs have been marked, there seems to be a large number, such, for instance, as give a taste for seeing *Architecture, Waterfalls, Statuary, Volcanoes, Caverns, the Heavens, the Earth, Animals, Birds, Insects, Storms, Battles, the Ocean, Fruits, Flowers, Meteors, Landscapes, Pyramids, &c.*

70. *Antiquities.* Desire for knowledge of antiquities.

71. *Sense of Perfection.* Admiration of symmetry, completeness.

72. *The Beautiful.* Giving a sense of the fitness of properties and things.

73. *Contentment.* As opposed to discontent.

74. *Cheerfulness.* Disposing to animation, good spirits.

75. *Joy.* Disposing to joy, in opposition to sadness.

76. *Playfulness.* Disposing to play, to fun, buffoonery.

77. *Curiosity.* Giving a desire to pry into things and affairs which are not immediately made known.

78. *Fiction.* The power of creating ideal events.

79. *Confidence.* Disposed to trust, without fear.

80. *Wit.* The power of associating ideas in a new and unexpected manner; as distinct from *Mirth*, or the disposition to laugh.

81. *Worship.* Gives a disposition to adore, to worship; appropriate to the Deity; Veneration is applied to men.

82. *Obedience.* Disposed to yield obedience to superior authority.

83. *Gratitude.*

84. *Pity.* Compassion. This gives the feeling of commiseration. Benevolence bestows the gift. Many persons have large Pity, but small Benevolence.

85. *Faith.* An organ appropriate to the exercise of faith, in the Deity, and a future state, as distinct from Marvellousness.

86. *Spirituality.* Giving the power to distinguish between spiritual, and material things.

87. *Fear of God.* As distinct from mere caution, or the fear of bodily pain.

We have seen how the action of the organs may be *increased*, in certain persons, either awake or asleep; but that the excitement, when it is extraneous, or when it is out of proportion with the state of the other organs, or with the natural and healthy state of the brain, is morbid, cannot admit of a doubt. Probably no one will feel disposed to deny, that an *unnatural* or extraneous excitement, of any one or more of the mental organs, is *morbid*. I say unnatural, because, sometimes, an organ may need exciting to its natural tone, or degree of activity; in such cases, the action may be perfectly healthy, though, indeed, not caused by any inherent stimulus. But I refer, now, to those excitements of the mental organs which produce the remarkable results which have so much astonished all who have witnessed them; those excitements which exceed the nature of the person in whom they are produced.

We know what results follow Monomania. A man of good education, and intelligent, called on me, and gave the following account: "I see," said he, "constantly above me a man walking upon the clouds!" But where is he, I inquired? "O," said he, "there! there! *there!!* he is, see, see him! See! he has a cloud wound around his hat." And I could make nothing so real to the perception of that Monomaniac, as the sight of that man walking upon the clouds.

Another, suffering from an over excitement of Marvellousness and Veneration, told me he saw the devil, and he even showed me the spot where he had had a fight with his satanic majesty; and pointed to the ground, torn up and scattered in various directions, as evidence indisputable, of what he stated. Now in these cases, the perceptions of these Monomaniacs were as real, and probably of the same character, as

those produced by Pathetism. A short time since I excited the Ideality of a very intelligent lady, and she immediately saw and described a very singularly looking man, *dancing*. At another time she saw various odd looking animals and persons, all of them, undoubtedly, the creations of this excited organ. Indeed volumes might be filled with accounts of a similar character, describing visits to the sun, moon, and stars; and of which we may make just as much, as of the man seen walking upon the clouds.

I have stated that the action of the separate organs may be either suppressed or excited, both in a state of somnipathy and when the patient is awake, and I will now bring this chapter to a close by giving a few specimens of the results of these different effects.

Soon after discovering this susceptibility of the cerebral organs, a meeting was called at my instance by the proprietor of the New York Museum, of a number of scientific gentlemen, for the purpose of testing, in all suitable ways, the reality of this agency in controlling the cerebral organs. The first meeting was held at the Museum, September 8, 1841. The experiments were conducted under the inspection and direction of a committee, and the results were written down at the time by one of the Committee, and published in the New York Watchman for November 6, 1841.

The patient had been perfectly blind, from the time she was six weeks old, her eye sight having been destroyed by accident. It was believed by those who knew this lady, that she had no knowledge of Phrenology. Before suppressing or exciting either of the organs, it will be noticed, the questions were proposed to her to ascertain what their action was in the normal state, and, to see how it would correspond with the effects produced upon them by pathetism. On being put to sleep, the experiments proceeded as follows:—

Q. "Do you know me, Mary?"

A. "Yes, it is Mr. Sunderland."

Q. "I want to talk with you on the subject of religion. Do you love the Savior?"

A. "Yes, I love the Savior."

Q. "What are your views on the subject of religion?"

A. "O, I think a great deal of it."

Q. "Have you faith in God?"

A. "Yes."

Q. "Who baptized you and admitted you into the church?"

A. "Dr. Eastburn."

Q. "What do you think of Dr. Eastburn?"

A. "O, I think he is a very good man,—I like him very much."

Q. "Where do you think you will go when you die?"

A. "To heaven, I hope."

The organs involved in these questions, it will be seen, were *Veneration, Worship, Love, Faith, Hope, and Adhesiveness*. The action of these organs was now arrested, by merely reversing the passes over them. My questions and her answers were then as follows:—

Q. "Do you love the Savior any, Mary?"

A. "*No, I don't know as I do.*"

Q. "Have you any regard for religion?"

A. "*No, I don't care much about it.*"

Q. "Where do you think your soul will go when you die?"

A. "*O, I don't know much about that.*"

Q. "What do you think of Dr. Eastburn?"

A. "*I don't think he is any better than other folks.*"

Q. "Have you any desire to go to heaven?"

A. "*I don't care any thing about it.*"

These organs were excited and brought back to their previous state, and the action of *Acquisitiveness* was next arrested in the same way.

Q. "Would you like to have me make you a present of my watch?"

A. "I don't care much about it."

Q. "Do you care much about those rings on your fingers?"

A. "No, only for the sake of those who gave them to me."

Q. "Suppose some one were to take all your money and clothes from you?"

A. "Well, they might keep them."

These organs were then excited:—

Q. "What would you think if a person should take all your clothes and money from you?"

A. "I should think they were very cruel to take them from me, for I cannot get money so well as other folks."

Q. "Are you fond of property?"

A. "O, yes, if I could only have enough of it."

Her action of Wit was next arrested.

She was then asked numerous questions calculated to excite laughter, but without effect. The operator now restored those portions of the brain, by his will, merely, and by the feeling which he showed (by signs) in himself, she was thrown into a violent fit of laughter. And when one of the questions, which had just been put to her without effect before, was now proposed to her, she was convulsed with laughter, and said she was particularly fond of fun.

One of the spectators having suggested that the last experiments were not satisfactory, inasmuch as the questions, in some cases, would give her (admitting she was not asleep) an idea of the *object* we had in view, Dr. Channing wrote down the following questions. *Adhesiveness*, it is said, forms attachments to friends. It will be seen, that some of the questions do not relate, at all, to this faculty. This was *designed to deceive* her, in case she was not really asleep:—

Q. "Do you love money?"

A. "Yes, very well."

Q. "*Are you fond of your friends?*"

A. "Yes, sir."

Q. "Do you love dress?"

A. "Yes, sir, more than I wish I did."

Q. "Do you love your relations better than any body else?"

A. "I don't know; but I find friends who are not my relations."

Q. "Do you admire beautiful things?"

A. "Yes, sir, anything I can get at, or hear, such as Poetry, &c."

Q. "*Do you love to be with your friends?*"

A. "Yes, sir."

Q. "When they are absent do you love to call them to mind?"

A. "Yes, I do."

The operator now reversed the passes over Adhesiveness, when the questions and answers were as follows:—

Q. "Do you love dress?"

A. "O, yes, better than I ought to."

Q. "*Do you love your relations better than you do others?*"

A. "*I don't know.*"

Q. "Do you admire beautiful things?"

A. "Yes, such as I can get at—I can't see."

Q. "*Do you love to be with your friends?*"

A. "No."

The answers were precisely as before, in every particular except in relation to the organs whose functions had been arrested.

It was now (secretly) proposed to examine the effects on the organ of *Philoprogenitiveness*. The questions were written, and intermixed with others, in such a way, as to preclude the possibility of deception on her part, as will be seen. They were numbered for the purpose of comparing her answers, both before and after the organ had been arrested. A lad about twelve years old, was put in communication with her, and asked the questions; and her answers were taken down in her own words:—

1. Q. "How old are you?"

A. "Twenty-six."

2. Q. "Do you like music?"

A. "Very much?"

3. Q. "Do you love children?"

A. "*Yes, dearly.*" (this was said with great emphasis.)

4. Q. "Which do you love best, very little children, or those half grown?"

A. "I love little infants best."

5. Q. "Do you choose your friends among the young?"

A. "No, not of course."

6. Q. "How do you like to hold little squalling babies?"

A. "I like to hold them to get them quiet, but do not like to hear them cry."

7. Q. "Do you prefer the music of the piano to the music of babies?"

A. "O, yes, I like the music of the piano, but don't like to hear the cry of babies."

The operator now reversed the passes over Philoprogenitiveness, and her answers to each of the questions were as before, *except* the following, which were given to those corresponding to these numbers:—

3. "*No, I don't like them.*"

4. "*I don't like little infants.*"

6. "*I don't like to hold them.*"

From which it will be seen that her answers to those questions which involved Philoprogenitiveness, were directly the reverse, after the functions of that organ had been suspended, as it seemed to be by the reverse passes.

The following example will shew how the mind of the patient is affected under these excitements, as in this case no questions were asked, by which any suggestion could have been given of the anticipated effects; and besides, these results were produced upon a person who was blind, and without even touching the head; so that it was utterly impossible for her to have any idea from contact or by any other sign, what organs were pointed at; for these expressions were made by her, on my merely holding one of my fingers within an inch or so of the different organs, marked below:—

Individuality.—"O, I'm thinking of all the individuals I ever knew. O, I have known more persons than ever you did."

Size.—"Holding up her hands,] "This is so big—this is so small," &c.

Color.—"O, I want a beautiful pink shawl. O, those beautiful colors."

Eventuality—Ancient.—"I remember—O, I remember every thing that ever took place in my life."

Number.—"Holding up her fingers she commenced counting,] "One, two, three, four," &c.

Calculation.—This excited, she commenced enumerating—
“Ten times ten are one hundred,” &c.

Tune.—She commenced singing, and never did I hear singing in which there was so much real musical expression, as I have often witnessed from persons in whom these organs had been excited.

Comparison.—“These hands are both alike. O, I’ll tell you whom you are like,” &c.

Causality.—[The head bent forward.] “*Why* is it that this subject is so much misunderstood? O, I can tell you, ’tis because you do not understand it.” And various other expressions in which “*why*” and “because” were used.

Supplication.—“O, you must pray, I cannot—I want to pray, but I cannot.”

Self Esteem.—[Lifting the head up, and bringing it up in a haughty position.] “I am the greatest person living. I am better than any of you. Yes, indeed I am.” We never heard the emphasis put upon the pronoun “*I*” so to the very life, as when this organ is excited by pathetism.

Wilfulness.—“I will have my way—O, I don’t want to be crossed by any of you—I *will* have it,” &c.

Physical Fear.—“O, I am afraid, I shall fall—help me,—see there, I am afraid —— will come and kill me.”

Moral Fear.—“O, I am afraid to pray to God! He is angry with me,” &c.

Gratitude.—“O, I am so thankful—you have been so kind to me—O, I do feel grateful.”

Conscientiousness and Acquisitiveness.—“O, I want some money—is it right to love money? O, no, I know it is not right—but what shall I do?”

Veneration and Combativity.—[The head was immediately thrown back, then forward, the hands clasped, as in prayer, and then jerked apart again.] “O, I want to pray—but I am mad with you all—O, I feel so mad, and yet I want to worship.”

Hope, Joy, Veneration and Faith.—[The head was slightly bent forward, and the hands clasped as in devotion.] “O, I

am so happy! I do hope to be saved—yes, I believe in Jesus Christ. O, I am perfectly happy—O, I am in heaven," &c.

Imitation and Mirthfulness.—She immediately commenced mimicking different persons, with an immoderate fit of laughter.

And so of the other organs. In each case, it must be borne in mind, that the excitement was removed from one organ before it was extended to another.

CHAPTER X.

SLEEP AND DREAMING.

It is curious enough to think, how little we know of the true nature of natural sleep, when about one-third of our entire existence is spent in this state. We cannot, of course, acquire a knowledge of its cause and laws, while *in* this state, and hence we must stand off at a respectful distance from its reach, in order to ascertain any thing satisfactory with regard to its nature, when contrasted with the waking state. The first thought that occurs, on considering sleep, is, the relation which it holds to wakefulness, in perfect correspondence with the law of *contrariety* to which I have before so frequently referred, and which so beautifully alternates all the states both of the mind and body. *Joy—Sadness; Love—Aversion; Resistance—Submission; Patience—Discontent; Confidence—Suspicion; Intellectual—Animal; Wakefulness—Sleep; Life—Death.* Sleep, therefore, is the negative of the waking state. But, as it does not come within my plan to enter minutely into an examination of the anatomy of sleep, my remarks will be confined to a few of its distinguishing features, that we may the more easily see how, or in what respects, it would seem to agree with the states distinguished by the terms *Somnium* or *Somnipathy*.

It has been said, that to dream is to sleep. But this needs some qualification, inasmuch as by *Pathetism* we can often cause persons to dream who are not asleep, and I have often made patients dream of any given subject, after falling into a state of common sleep, by giving them certain impressions or directions while in a state of *somnipathy*. And others I have prevented from dreaming in the same way.

1. *The Will.*

In proportion to the degree of soundness of the sleep, is the control of the will over the muscles and mental faculties suspended. Nor is it in the power of the will, finally, to resist sleep. It may be deferred for a while, but, sooner or later, the will yields, and sleep assumes control over the entire system, so that every muscle, nerve, tissue, and portion of the body, is made to feel its influence.

Somniphathy is never induced, at first, against the will of the subject. And even when it has once been brought on, it does not appear that the will of the patient is wholly destroyed or suspended. Persons in this state have the power of self-determination, though not of self-control, and usually exert it more or less according to their own views and wishes.

2. *The External Senses.*

Sometimes the external senses are stolen away in a moment, but more ordinarily they cease their functions slowly and by degrees. But when the sleep is perfect, the senses are as really annihilated as though the body were dead. The sense of feeling, seeing, tasting, smelling, hearing, and the power of locomotion, are gone, and exist no more until wakefulness summon the various cerebral functions again to action. Hence we find the mind, when passing from wakefulness to sleep, and from sleep to wakefulness, is in a state of delirium. Things appear confused; and it is easily misled in its conceptions. The thoughts wander because the will no longer controls them, until the power of thought is fully suspended, and the mental functions are completely reduced to a negative condition.

In a state of somniphathy, generally, the senses do not seem to be annihilated, but rather transferred, as we have seen. And in these peculiar states they are sometimes heightened and increased in their intensity, as it were, a hundred fold.

3. *Dreaming.*

When one or more of the mental organs are active during sleep, it is called dreaming. But this activity is more or less partial; and though we may be able, frequently, to reason

correctly, to a limited extent, and though the mind may, and does, seem to have many very remarkable perceptions in sleep, yet, it is always more or less incapable of distinguishing the mere ideal from realities. Hence we have the grossest incongruities in our sleeping mental conceptions, without the least surprise, and at other times the most beautiful ideas flit before the mind, when it has no power to retain them. I have found a number of intelligent persons who were unable, at times, to distinguish some of their dreams from what took place during their waking state; and they would frequently narrate their dreams, as matters of fact, without any suspicion that they had merely dreamed the details they were narrating. And things dreamed, and forgotten, I have caused some of my subjects to remember, by exciting portions of the brain for this purpose.

It has been supposed that there is a cerebral organ appropriate to the function of dreaming, and if so, it will explain how it is, that some persons dream very little, and others not at all.

In a number of cases where persons have been troubled with frightful dreams, I have given perfect relief by Pathetism; and in others, I have caused persons to dream of any given subject at pleasure. In sleep, the mind may have all the emotions or conceptions which it ever had in the waking state, and sometimes impressions are made upon it, far more deep and affecting than any received while awake. The reason is obvious. In the waking state of consciousness, the attention is divided among the different faculties and senses; but frequently, in sleep, the forces of the brain seem to be concentrated into one organ, and impressions made upon it are deep and affecting, just in proportion to its activity, while all the others are dormant and inactive.

I have already referred to the relation which sleep holds to a state of wakefulness, and how strikingly these states alternate in harmony with one of the laws of nature. From this fact it is not unreasonable to suppose, that there may be an organ of *Wakefulness*, of which sleep is the antagonism. We

have seen that it is a law of the human system, that the excitement of any one of the cerebral organs, suppresses the action of its corresponding opposite organ. Love suppresses hatred; joy suppresses sorrow; consciousness, or wakefulness, suppresses sleep, and vice versa. This supposition would seem to throw light on this mystery, and to be supported by the following facts:—

1. That natural sleep may become more or less voluntary. Dr. Reid found no inconvenience from taking food, and immediately afterwards falling into a state of sleep sufficient for two days. And Quin, a celebrated actor, it is said, slept for twenty-four hours successively. In such cases, this organ may be supposed to be largely developed. And may not this assumption explain the reason for persons immediately waking up on the cessation of any noise during which they fell asleep? A miller found it impossible to fall asleep without the noise of the mill. A person has been known to fall asleep within a huge boiler, while others were constantly beating it on the outside with their hammers; and on the cessation of the noise wakefulness returned.

2. That it should be continued in certain cases so very long.

A lady is mentioned by Dr. Mac Nish, who spent three-fourths of her life in sleep. A woman in Henault slept from seventeen to eighteen hours a day, for fifteen years. De Moivre slept twenty hours out of the twenty-four; and Thomas Parr slept away the greater part of his life. Other cases are well known, where persons have slept a week, a month, and six weeks at a time. Of course, nourishment was given them during this time. But it does not solve the mystery to say, that sleep, in these cases, was a disease. What part of the system was diseased?

3. That persons are often able to live so long without sleep.

A recent number of the Boston Medical and Surgical Journal, contains a letter from Mr. Robert F. Gourlay, now of Boston, Mass. giving an account of his extraordinary sleep-

lessness. Mr. G. says he was first bereft of sleep in the year 1833 for six weeks, when about 40 years of age. Prior to that time he had never suffered for want of sleep, although at times a little sufficed for refreshment. He was confined in London, as he alleges, by British tyranny, three years and eight months, and it was during this period, that a habit of living without sleep began to form. During his confinement he felt very little need of sleep, and the greater part of his time in bed, which was never more than six hours in the twenty-four hours, was given to reveries.

Soon after his liberation, having first visited Scotland, he left Edinburgh for America. He had no sleep until he arrived at Liverpool, where he took a warm bath before going to bed. This had the desired effect, and procured him a few hours repose. The next morning he embarked for N. York, which he reached in 42 days, without having one wink of sleep.—Immediately on landing at New York he procured a warm bath, got into a comfortable bed and slept soundly. From that time forward he did not sleep for three years. He took laudanum, but that had no effect; he drank whiskey in the hope that it would induce sleep, but it only made him sick.

In the early part of 1837, while in Ohio, he was attacked with erysipelas in the leg, and during five months was without sleep. He had recovered his health in some degree when intelligence reached him of the death of two of his children.—He then lay two weeks in great agony, and from that time to this, a period of *four years and six months*, he has been entirely deprived of sleep. His health has much improved, and he entertains a hope that as soon as he is able to take exercise, he will recover.

A man is mentioned by Sir John Sinclair, who lived to the age of ninety-one years, and, on an average, slept only four hours in the twenty four. Dr. Mac Nish says he knew a lady, who enjoyed excellent health, and yet, the whole period of her sleep did not exceed four hours in the twenty four, and she never slept over thirty minutes at a time. Frederick the

Great, and John Hunter, slept only five hours during the twenty-four. It is said, on the authority of Sir Gilbert Blane, that General Pichegru, during a whole year, while on an active campaign, did not average over one hour's sleep during the twenty-four.

That persons go a long time without sleep, frequently, from mental or nervous excitement, we know; but even these cases may confirm the theory above stated.

4. The well known effects of excessive sleep, or continued wakefulness.

Too much sleep produces dulness, lassitude, headache, and even death. Boerhaave speaks of a student, who from a belief that sleep was the natural state of man, slept eighteen hours a day, which soon caused his death by apoplexy.

Wakefulness, too long continued, causes physical and mental imbecility, fever, headache, inflammation of the brain, and insanity. These habits would seem to destroy the balance of power between the organs of wakefulness and sleep, and hence the results appear precisely as if the same violence were done to the relation between any two of the others, by which the harmony of action and influence should become perverted or destroyed.

5. This assumption is favored by what we know of the different means for producing artificial sleep.

Cerebral effort disposes to sleep. Hence all persons who exercise the mental functions to excess, require more than ordinary sleep. Every thing *monotonous* produces sleep. Filling the stomach with food, so as to draw the vital forces from the brain for the purpose of disposing of its contents, has the same effects.

Combing the head, or shaving, or holding the hands upon the frontal or coronal regions, produce drowsiness; and if the subject be susceptible, placing the hands on almost any part of the head or system, with this *avowed purpose*, will dispose to drowsiness, and if continued long enough will induce sleep. The application to the temples of a small plaster, made of half an ounce of henbane and one scruple of opium, disposes

to sleep, and is said to be an excellent method for removing sleepiness, when it has been brought on by grief or nervous excitement. But for soothing the nervous system, and removing difficulties of this kind, there is no remedy equal to Pathetism.

CHAPTER XI.

SOMNIUM—TRANCE—SOMNAMBULISM.

There is a most striking similarity in all these states, which leaves no room to doubt, as to the agencies by which they are brought on, or that peculiar state of the system favorable to their development. And it is worthy of notice, that, while many of the medical profession, as well as others, readily admit the reality of the phenomena which appear in a state of somnium, or trance, they set the whole down as nothing better than humbugging, if it be once alleged that this peculiar state has been induced by artificial means.

In cases of somnambulism, some of the intellectual organs appear to be highly excited, and it is certain, that many somnambulists have been known to do things, of which they were wholly incapable in the waking state. It is not unlikely but that the medical profession will, ultimately, agree to call this a state of insanity; for it is plain, that in many respects it resembles insanity, both in the nature of some of the mental exercises, and also in the muscular strength put forth.

The books contain many facts of this kind—enough, certainly, to satisfy the most sceptical as to the existence of what, perhaps, may be denominated the *independent sense*—a sense which sometimes enables certain persons to see, hear, &c. without the use of the organs of seeing and hearing.

A correspondent of the author,* describes the case of his brother, who, while asleep, would often arise and write poetry and long letters, in a room perfectly dark. He would make his lines straight, cross his t's and dot his i's, and make it perfectly legible. He seemed to be clairvoyant when in

* L. Collins, East Bloomfield, N. Y.

that state; and would often tell what a sister and brother-in-law were doing, and where they were, when several hundred miles off. They were travelling for the health of his brother-in-law, and the brother, while in his reveries, would tell the state of the health of the invalid. His statements, though many and often, were always found correct. This was in 1827.

The following particulars of a case of somnium and somnambulism, I have from an eye and ear witness, who was himself a resident of the family at the time.* It was that of a young lady, who was in the habit of rising in the night and dressing herself, and at these times she would converse, though she was evidently in a state differing very much from her usual waking condition. She would instantly arise from her bed at the sound of a violin; and after dressing, would engage in conversation with her eyes open. At these times she called every one of the family by a new name, which she invariably applied to each when asleep, but of which she had no knowledge when awake. She could see perfectly well in the dark, and would often read in any book in the darkest night, when the shutters were fast closed, and the room as dark as it possibly could be. At such times she not only read correctly, but would tell the exact time by any watch, however the hands might be moved back or forward. When in a state of somnium, it was common to go out with her to the neighbors; and when once approaching a fence nearly as high as her head, she put her hand upon the top, and leaped over it with perfect ease.

It was noticed that she would never read in one particular book; and a neighbor, with the view of detecting what he supposed to be deception, cut out a paragraph from that book, and pasted it into a pamphlet; this pamphlet he then put with half a dozen others, and handed the whole to her, without her knowing what he had done. She took them, and on coming to the one which had the extract in it, she instantly threw it aside. He then retired, and cut out *one* word, and

* Deacon N. Moody, Hallowell, Maine.

pasting it into another, put it with the number, and again requested her to read a paragraph from each. But she instantly detected the pamphlet into which the word had been pasted. He then cut out one letter only, and pasting it into one of the pamphlets as before, she detected that one without opening it, and cast it from her as before.

A lock of her hair was cut off, and taken into another room. On its being put into the fire she perceived it, and manifested much pain and uneasiness. Though she often went out among the neighbors while in a state of somnium, there was one *direction*, in which, if she started to go, she was immediately restored to consciousness. She was finally relieved by being taken across the Merrimac river *for this purpose*, as it was said by a reputed witch* that this process would prevent her from falling into that state again. And I have found in such cases, that almost any process, recommended by certain persons, will be equally effectual in breaking these spells, and arresting those abnormal dispositions to sleep and somnambulism. The process, whatever it may be, will certainly prove effectual, if the mind or susceptibility be sufficiently impressed with an apprehension of the certainty of the cure.

Drs. Righellini and Pigatti describe, from their own observation, the somnism of a man servant named Negretti, twenty-four years of age, who, from his eleventh year, had experienced attacks of the disease in March, not extending beyond April. March 16th, 1740, after going to sleep on a bench in the kitchen, he first began to talk, then walked about, went to the dining room and spread a table for dinner, and placed himself behind a chair with a plate in his hand, as if waiting on his master the Marquis Luigi Sale. After waiting till he thought his master had dined, he cleared away, and put all the things into a basket, which he locked up in a cupboard. He afterwards warmed a bed, locked up the house, and prepared for rest. Being then awakened, and asked if he remembered what he had been doing, he answered 'No.' Often, however, he did remember. On the 18th of the same

* The far-famed "Moll Pitcher," of Lynn, Mass.

month, he went through the same process, but instead of going to bed, went into the kitchen and sat down to supper. Dr. Righellini, with many others, were very curious to see him eat. At once recollecting himself, the man said, 'How can I so forget? to day-is Friday, and I must not dine.' He then locked up every thing and went to bed. If water was thrown in his face or his eyes were forcibly opened, he would awake, but remained some time faint and stupid. His eyes were firmly closed in the paroxysm, and he took no notice of a candle placed close to them. Sometimes he went against the wall, and even hurt himself severely. If any body pushed him, he got out of the way, and moved his arms rapidly on every side; and, if in a place with which he was not well acquainted, he felt all the objects around with his hand, and showed much inaccuracy; but in places familiar to him, he was not confused, and went through with his business well. After Dr. Pigatti had shut a door through which he had passed, he struck himself against it on returning. Sometimes he carried a candle about, but on a bottle being substituted, he carried it about as if it were a candle. Dr. Pigatti was certain he could not see. Once in his sleep he said he must go and hold a light to his master in the coach. Dr. Righellini followed him closely, and found that he stood at all the corners of the streets with his torch not lighted, waiting awhile in order that the coach which he fancied was following might pass, when the light was required. On one occasion he ate several cakes and some salad for which he had just asked the cook. He then went with a lighted candle into the cellar and drew wine which he drank. He would carry a tray with wine glasses and knives, and turn it obliquely, to avoid an accident, on passing through a narrow doorway. Dr. Pigatti once substituted some very strongly seasoned cabbage for a salad which he had prepared, and had sat down to eat: he ate the cabbage, and then some pudding which was substituted for it, without perceiving the difference. At another time, having asked for wine, he drank water which was given to him; and sniffed ground coffee after asking for snuff.

Dr. Francesco Soave relates the case of Castelli, the pupil of an Italian apothecary. The youth was found asleep one night, translating Italian into French, and looking out the words in a dictionary. They put out his candle, when, finding himself in the dark, he began to grope for it, and went to light it at the kitchen fire, though other candles were alight in the room. At other times he had gone down to the shop and weighed out medicines, and talked to supposed customers. When any one conversed with him on a subject on which his mind was bent, he gave rational answers. He had been reading Macquer's Chemistry, and somebody altered his marks. This puzzled him, and he said, "*Bel piacere di togliermi i segni.*" He found his place and read aloud, but his voice growing fainter, his master told him to raise it, which he did. Yet he perceived none of the persons standing round him; 'and though he heard,' says Dr. Soave, 'any conversation which was in conformity with the train of his ideas, he heard nothing of the discourse which these persons held on other subjects. His eyes seemed to be very sensible to objects relating to his thoughts, but appeared to have no life in them; and so fixed were they, that when he read, he was observed not to move his eyes, but his whole head from one side of the page to the other.'

In 1686, Lord Culpepper's brother was indicted at the Old Bailey, for shooting one of the guards and his horse. He pleaded somnambulism, and was acquitted on producing ample evidence of the extraordinary things he did in his sleep. There is a somewhat similar story of a French gentleman, who rose in his sleep, crossed the Seine, fought a duel, and killed his antagonist, without recollecting any of the circumstances when awake.

A young man named Johns, at Cardrew, near Redruth, England, being asleep in the sumpter-house of that mine, was observed by two boys to rise and walk to the door, against which he leaned; shortly after, quitting this position, he walked to the engine shaft, and safely descended to the depth of twenty fathoms, where he was found by his comrades soon after with his back resting on the ladder. They

called to him to apprise him of the perilous situation, but he did not hear them, and they were obliged to shake him roughly till he awoke, when he appeared totally at a loss to account for his situation.

In the following cases a partial increase of mental power took place, as is sometimes noticed in insanity and common dreams:—

A boy dreamed that he got out of bed, and ascended to the summit of an enormous rock, where he found an eagle's nest, which he brought away with him, and placed under his bed. Now, the whole of these events actually took place; and what he conceived, on awaking, to be a mere dream, was found to have had an actual existence, by the nest being found in the precise spot where he imagined he had put it, and by the evidence of the spectators who beheld his perilous adventure. The precipice which he ascended was of a nature which must have baffled the most expert mountaineer, and such as, at other times, he could not have scaled.

Gassendi speaks of a man who often rose in his sleep, went into a cellar and drew wine, appearing to see in the dark as in the day; but when he awoke, either in the cellar or in the street, was obliged to grope his way back to bed. He often thought there was not light enough, and thought he had risen too early, and therefore struck a light. He tells of another who passed on stilts "over a torrent asleep one night, and on awaking was afraid to return before daylight, and before the water had subsided."

A female servant in the town of Chelmsford, England, surprised the family at four o'clock one morning, by walking down a flight of stairs in her sleep, and rapping at the bedroom door of her master, who inquired what she wanted; when, in her usual tone of voice she requested some cotton, saying that she had torn her gown, but hoped that her mistress would forgive her, at the same time bursting into tears. Her fellow servant, with whom she had been conversing for some time, observed her get out of bed, and quickly followed her, but not before she had related this pitiful story. She then returned to her room, and a light having been procured,

she was found groping to find her cotton box. Another person went to her, when, perceiving a difference in the voice, she called out, "That is a different voice—that is my mistress;" which was not the case—thus clearly showing she did not see the object before, although her eyes were wide open. Upon inquiry as to what was the matter, she only said that she wanted some cotton, but that her fellow-servant had been to her master and mistress making a fuss about it.

A lad named George David, sixteen years old, in the service of Mr. Hewson, a butcher in Bridge Road, Lambeth, England, at about twenty minutes past nine, one morning, bent forward in his chair, and rested his forehead on his hands, and in ten minutes started up, went for his whip, put on one spur, and went thence into the stable; not finding his own saddle in the proper place, he returned to the house and asked for it. Being asked what he wanted with it, he replied to go his rounds. He returned to the stable, got on his horse without the saddle, and was proceeding to leave the stable; it was with much difficulty and force that Mr. Hewson, assisted by the other lad, could remove him from his horse; his strength was great, and it was with difficulty he was brought within doors. The lad considered himself as stopped at the turnpike-gate, and took sixpence out of his pocket to be changed; and holding out his hand for the change, the sixpence was returned to him. He immediately observed, "None of your nonsense, that is the sixpence again; give me my change." When twopence halfpenny was given to him he counted it over, and said, "None of your gammon, that is not right; I want a penny more," making the three pence halfpenny, which was the proper change. He then said, "Give me my castor (meaning his hat), which slang term he had been in the habit of using, and then began to whip and spur to get his horse on. His pulse was at this time 136, full and hard; no change of countenance could be observed, nor any spasmodic affection of the muscles, the eyes remaining closed the whole of the time. During the time of bleeding, Mr. Hewson related a circumstance of a Mr. Harris, optician,

in Holborn, whose son, some years since walked out on the parapet of the house in his sleep. The boy joined in the conversation, and observed, "He lived at the corner of Brownlow Street." Soon after the arm was tied up, he unlaced one boot, and said he would go to bed. In three minutes from this time he awoke, got up, and asked what was the matter, (having been then one hour in the trance,) not having the slightest recollection of any thing that had passed, and wondered at his arm being tied up, and at the blood.

The case of Rachel Baker, or the sleeping preacher, as she was called, is well known. This lady fell into bad health, and under its influence she disturbed and amazed her family by her sleeping eloquence. Her parents made a tour with her of some length, and visited New-York and some other of the cities of the Union. I know individuals who have heard her preach during the night; and it was customary, at tea parties in this city, to put the lady into bed in a room adjacent to the drawing-room, in order that the persons present might hear her exhortations and prayers, delivered during a state of profound sleep.

Dr. Darwin relates the case of a young lady about seventeen years of age, who, every day for five or six weeks, had fits of violent convulsions, then retchings, next equally violent hiccoughs, then tetanus, and at last somniloquism and somnambulism, becoming insensible, yet singing, quoting whole passages of poetry, and holding conversations with imaginary persons, and coming to herself with great surprise and fear, but with no recollection of what had happened. At length, she could walk about the room in the fit without running against the furniture, and evidently had some external sense; for she took a cup of tea, and expressed a fear that there was poison in it; and seemed to smell at a tuberosc, and deliberated about breaking the stem, because it would make her sister so charmingly angry. She once heard a bell, was less melancholy when the shutters were open, and impatient if a hand was held over her eyes, or her hands were held down, saying "She could not tell what to do, as she could neither see nor move."

Gall describes the case of a young man at Berlin, who had extraordinary attacks from time to time. He was agitated in bed without consciousness; his movements and gestures showed a great activity of many internal organs; whatever was done to him, he did not perceive it; at length he jumped out of bed, and walked hastily in the apartment; his eyes were then fixed and open. He placed different obstacles in his way, which he removed with his hand or carefully avoided; then he threw himself suddenly on his bed, was agitated there some time, and at length awoke and sat up, very much astonished at the number of curious persons who were about him.

M. Joseph de Koggenbach, at Friburg, in Brisgau, told Dr. Gall, in the presence of many witnesses, that he had been a somnambulist from his infancy. In this state his tutor had made him read; made him look for places on the map, and he found them more readily than when awake; his eyes were always open and fixed; he did not move them, but turned his whole head. Many times they held him, but he felt the restraint, endeavored to liberate himself, but did not wake.— Sometimes he said he should wake if they led him into the garden, and *this always happened*.*

Professor Upham, of Bowdoin College, speaks of a farmer who rose in his sleep, went to his barn, and threshed out five bushels of rye in the dark, separating the grain from the straw with great exactness.

The Portland (Maine) Bulletin of November 1, 1842, refers to the case of Captain Jeremiah Brown, of that place, who, being sick and confined to his berth while at sea, saw distinctly all that transpired around him. He saw vessels as they passed him, and others at anchor, told what took place on board of them, the truth of which was attested by his mate and others, to whom he related what he saw.

A scientific friend of the author's in this city, describes, in the Magnet for November, 1842, the case of his own sister, who would become exceedingly alarmed in a sound state of sleep. Her screams would arouse the whole family. Lights

* The above, with other similar cases, may be found also in Dr. Elliotson's Human Physiology, with their respective authorities.

brought to her shewed her eyes wide open, streaming with tears, while all efforts to bring her to a state of consciousness proved unavailing.

A patient whom I recovered from a dreadful state of nervous derangement, often conversed in her sleep, and I have heard her repeat some of the most beautiful strains of poetry, and of which she did not seem to have any knowledge on waking up. The following verses I took down from her lips in one of these states :

“ Dost thou think, because I smile,
And joy, and wit, and friends surround me,
There is no torturing thought the while,
That with its secret power can wound me ?

Ah ! know, then, I have schooled my heart
To stifle every wayward feeling ;
And dearly have I bought the art—
Not that of conquering, but concealing.”

The case of the young ecclesiastic related by the Archbishop of Bordeaux, is well known. He imagined himself one night, in the midst of winter, walking on the bank of a river, and seeing a child fall in, who was drowning. He instantly threw himself on his bed in the posture of swimming—performed the motions of swimming, till he seemed to have fatigued himself, when he felt on the corner of the bed a bunch of the covering, which he took for the child. He seized it with one hand, and continued to swim with the other, returning, as it were, to the bank of the river. He then laid down his burden, and came out of the water shivering, and his teeth chattering as if he had been really in a frozen river. He said to those about him, that he was freezing—that he should die with cold—that his blood was frozen. He asked for a glass of brandy to warm him, but there being none at hand, they gave him water. He tasted it, perceived the cheat, and demanded more sharply, telling them the danger he was exposed to. They gave him some cordial, which he drank with much satisfaction, and said it gave him great comfort. He did not, however, awake, but went to bed again and slept more tranquilly.

The Bishop further informs us, that this young man would arise from his sleep, go to his room, take pen, ink and paper, and compose good sermons. When he had finished a page, he would read it aloud, and correct it. Once, he had written *ce devin enfant*; in reading over the passage, he substituted *adorable* for *devin*; but observing that *ce* could not stand before *adorable*, he added *t*. *The archbishop held a piece of pasteboard under his chin, to prevent him from seeing the paper on which he was writing, but he wrote on, not at all incommoded.*—The paper on which he was writing was then removed, and another piece substituted; but he instantly perceived the change. He wrote pieces of music in this state, with his eyes closed. The words were under the music, and once, were too large, and not placed exactly under the corresponding notes. He soon perceived the error, blotted out the part, and wrote it over again with great exactness.

The following is interesting, as it is the account which a somnambulist gives of himself, and his own feelings, as near as he could recollect while in that state.

“From the age of ten to fifteen, it was almost a nightly habit with me to get up from my bed and travel through the whole house, unbarring the doors and walking through the different apartments with the greatest ease in utter darkness, sometimes unlocking the back door, and travelling into the yard and out-houses, stopping at different places, and examining, apparently with the nicest precision, such articles as happened to fall in my way.

“Yet after being awakened, not the slightest recollection remained of what had happened. During some of these nocturnal excursions, I opened a dormer window, and crawled out thence to the very apex of the roof! On one of these occasions, after getting on the top of the house, I was awakened by a slight shower of rain, and it was with difficulty I made a safe descent by way of the next neighbor's house, which obliged me to rouse the family in order to get back to my bed again.

“The most singular feat, however, that I performed in the somnambulic state, was a situation that I got into, out of which I could not extricate myself again in a waking state, neither could I, upon trial, without the assistance of something to step on first, get into it again. The room in which I slept at this time, had in it an old-fashioned cradle of double

length, made for twin babes. This was placed upon a long narrow keg, which stood on its ends, so that when standing alongside of it, the sides of the cradle came within two inches of my chin, and it was so poised, that a slight preponderance either way would capsize it. During one of my nocturnal perambulations in the middle of the night, by some means I got into this cradle, without the assistance of any thing that would enable me to step up, save some strange inexplicable cause. It was a cold winter night, and I became awakened while in the act of pulling books from around me, which were in the cradle at the time. After being perfectly awakened, it required a great deal of caution to support my centre of gravity, until I had called the assistance of some of the family to enable me to get down.

"In the somnambulic state, I am told my eyes are wide open, and have a glassy appearance. Although I would answer questions, and talk freely on subjects that were indicated by my conduct, yet it was next to impossible to waken me by any other process than the application of cold water. After a more advanced age, these symptoms have taken a different form, my nightly perambulations being confined to my chamber, and they are more particularly connected with the organs of hearing and vision. It does appear, that, like the inner vision without the aid of the external eye, there is also a distinct faculty of hearing, independent of the external ear. This has been experienced by persons of my acquaintance. I have frequently hastened to the place from whence sounds appeared to come. Generally it appears to be the calling of my name, by persons whose voice I can recognise; but the most frequent delusions are through the eye. These symptoms from their frequency, although not fearful in themselves, have been of late a source of annoyance, and they always occur in a half-waking condition. The clearer and smoother the chamber in which I sleep, the less am I annoyed with these delusions. Of these symptoms and their operations, I have a tolerable distinct recollection afterwards. I generally find myself sitting up in bed, in the act of getting up and moving towards the objects, which mostly appear to be human beings, and often persons of my acquaintance. Although this happens to me in a half-waking condition, still, I possess the faculty of reasoning within myself upon the necessity of not minding these delusions, but seldom become perfectly satisfied until I get up and try to touch the object; but invariably get awake on being touched by another person. After being awakened, it has often appeared to me that a conflict had been going on between the material and spiritual functions."*

* Letter of Mr John Wise, Lancaster, Penn.

The term *trance* has long been used to signify a state, in which the soul seems to have passed out of the body into the celestial regions; and I have seen persons who were subject to ecstasies which were thought peculiar, only, to those who had actually left the body, and passed into heaven.

I have often produced this state by pathetism. The persons in whom it is brought about, describe it as one of the most delightful imaginable. But frequently they manifest an unwillingness to describe it at all, as they say it so far exceeds all our ordinary conceptions of what is elevated, refined, beautiful, and heavenly. It seems to differ from the ordinary states of somnium, merely in the degrees of abstraction of the mind to which it is carried, and in respect to the locomotion of the patient. In what is called *trance*, the patient usually sits or is perfectly still, and the mind seems to be employed upon what are considered immaterial subjects. Sometimes we find such persons remarkably clairvoyant; they describe with accuracy persons and places, without the use of the external senses. A case of this kind has just come under my notice in this city.

A young lady about sixteen years of age, made a public profession of religion, and connected herself with one of the Methodist Episcopal Churches here. For the last ten days (April 4, 1843,) she has been most of the time in a state of *trance*, as her religious friends call it. It commenced very soon after she had been much *excited*, and had professed to become completely sanctified. She was observed to fall into an apparently unconscious state, and the limbs becoming quite rigid, precisely like the cases I have before described of natural somnambulists, or when I have induced the state by pathetism.

This is, undoubtedly, a case of somnambulism, though her friends (some of them) think it quite *miraculous*. She has, occasionally, a correct perception of the characters of different persons who enter her room, and will address them in reproofs, or exhortations to prayer and praise, according to their various characters, though she is said to have had no previous knowledge of them beforehand. When one enters her

room who is pious, or is believed to be so by her, she clasps her hands into the form of what she calls "a crown," and places them upon his head; and the statements she makes about the characters, views, and feelings of those who have been to see her, are considered by her friends as the miraculous interpositions of the Divine Being. And I confess, that there is every way as much of the miraculous in this case, as in those of the "Tyrol Virgins," noticed below.

One of her friends, a clerical lady, seemed to view it as quite profane, when I informed her that I had put persons into a state precisely similar, in which they had made descriptions of the characters of strangers, every way as correct and remarkable as in the present case. And it is curious enough, to see how honestly many good people will believe in a case of natural clairvoyance, when they are horror-struck at being told that the same state may be artificially induced, without any thing of the *miraculous* in it.*

One of the most remarkable trances upon record, is that of the well-known William Tennent, a Presbyterian clergyman, then of Brunswick, N. J. There are persons now living who knew this pious man, and some who still believe he actually died, or left the body, and went to heaven. The following is his own account of it :

"While I was conversing with my brother on the state of my soul, and the fears I had entertained of my future welfare, I found myself in an instant in another state of existence, under the direction of a superior Being, who ordered me to follow him. I was accordingly wafted along I know not how, till I beheld at a distance an ineffable glory, and the impressions of which on my mind it is impossible to communicate to mortal man. I immediately reflected on my happy change and thought—Well, blessed be God! I am safe at last, notwithstanding all my fears. I saw an innumerable host of happy beings surrounding the inexpressible glory, in acts of

* I have been often reminded, that had I set up for "a prophet" before I restored a lady to her voice (who had been mute for two years) last summer, or before I had performed some other remarkable cures, I might have held a successful competition with Joe Smith, and shared the chances with him of lining my pockets with gold, instead of working for nothing, as I have done, and being reported as a mere juggler, or something worse.

adoration and joyous worship; but I did not see any bodily shape or representation in the glorious appearance. I heard things unutterable. I heard their songs and hallelujahs of thanksgiving and praise, with unspeakable rapture. I felt joy unutterable and full of glory. I then applied to my conductor, and requested leave to join the happy throng; on which he tapped me on the shoulder, and said 'You must return to earth.' This seemed like a sword through my heart. In an instant I recollect to have seen my brother disputing with the doctor. The three days during which I had appeared lifeless seemed to be not more than ten or twenty minutes. The idea of returning to this world of sorrow and trouble gave me such a shock, that I fainted repeatedly." He added: "Such was the effect on my mind of what I had seen and heard, that if it be possible for a human being, to live entirely above the world and the things of it, for sometime afterwards I was that person. The ravishing sound of the songs and hallelujahs that I heard, and the very words that were uttered, were not out of my ears for at least three years. All the kingdoms of the earth were, in my sight, as nothing and vanity; and so great were my ideas of heavenly glory, that nothing which did not in some measure, relate to it, could command my serious attention."

This extraordinary event is abundantly confirmed by the worthy successor of Mr. Tennent in the pastoral charge of his church. He states that after hearing from Mr. Tennent's own mouth a particular narration of this surprising trance, he said to him, "Sir, you seem to be one indeed raised from the dead, and may tell us what it is to die, and what you were sensible of while in that state." He replied in the following words: 'As to dying—I found my fever increase, and I became weaker and weaker and weaker, until all at once, I found myself in heaven as I thought. I saw no shape as to the Deity, but glory all unutterable.' Here he paused, as though unable to find words to express his views, and lifting up his hands, proceeded: 'I can say as St. Paul did, I heard and saw things unutterable. I saw a great multitude before this glory, apparently in the height of bliss, singing most melodiously. I was transported with my own situation, viewing all my troubles ended, and my rest and glory begun, and was about to join the happy multitude, when one came to me, locked me full in the face, laid his hands upon my shoulder, and said, 'You must go back.' These words ran through me; nothing could have shocked me more; I cried out, 'Lord, must I go back?' With this shock I opened my eyes in this world. When I saw I was in this world I fainted, then came to, and fainted for several times, as one naturally would have done in so weak a situation.'

I am not able to state whether any cases of spontaneous trance, or ecstasy, are on record of persons not religious; but certain it is, that for ages past, persons in the different religious denominations have been known to fall into this state.—The Papists have, from the beginning of their history, manifested great enthusiasm in detailing accounts of what they call “miraculous” ecstasy; and they have recently circulated immense editions of a pamphlet, entitled “The Virgins of the Tyrol,” throughout this country and in Europe, which purports to give an account of two Austrian girls, who have been in this state for some eight years past! The author of this pamphlet is said to be the “Earl of Shrewsbury;” but he does not seem to be *shrewd* enough, whoever he may be, to see, that he has been most egregiously deceived in supposing that no such results as he describes could be traced to the laws which induce a spontaneous state of somnambulism. He thinks, because these girls were not “Mesmerised” by any one, that their state must be miraculous. But that these virgins are of the sympathetic temperament, like the cases already detailed in this chapter, is fully proved by the account he himself has given of them. As these cases are deemed of so much importance at the present time, no apology will be necessary for attempting, here, to show their identity, so far as there may be any thing real in them, with the common cases of somnambulism. As, for instance:

1. Their health and temperament. It is well known, that disease predisposes persons of a certain temperament to this state. And it is said of these girls, Maria, “in her early years, had various attacks of illness;” and, it seems, from 1832 she has been, most of the time, confined to her bed with indisposition. Her temperament is manifest, from expressions made of her like these: “Her hazel eye,” and “her look is so open,” &c. Similar expressions, also, occur of the other, Domenica, who, it is said, enjoyed good health till 1828, since which time she has been indisposed, and for more than eight years *confined to her bed*. Here, then, is the foundation for all the wonders of their trances.

2. The manner in which these states of trance were commenced. For instance, of Maria it is said,—

“When, in 1832, she had attained her twentieth year, she evinced the first symptoms of ecstasy, falling into that state *each time she received the holy communion.*”

And of Domenica it is also said,—

“In the year 1833, she was first observed to fall into ecstasy *after receiving the holy communion*, but without rising from her bed.”

I have seen scores of persons, after kneeling in prayer, and others, when kneeling at the altar in Methodist churches for receiving the sacrament, fall into this state, and become apparently unconscious, *precisely* like what is said of these two nuns.

3. *Perceptions, without the use of the organs of sight or hearing.* Instances are given, where it is said these nuns had perceptions of the approach of the mass; and one of them, it is said, as it was carried through the town, “turned to it, as the needle turns to the pole.” And this, the pious Catholic is taught to believe, is MIRACULOUS, and demonstrative of the truth of Popery! Now, admitting the account to be true, it proves nothing for or against religion. Examine the preceding cases described in this chapter, and you will find enough of the same power of perception detailed, and which came on, spontaneously, like these now so much wondered at by Papists, far and near.

4. *State of unconsciousness.* The authors of this book think it quite miraculous, that these “virgins,” during their ecstasy, should have their “eyes wide open,” without seeing, so that when “a candle is held near the eye,” or when a fly lights upon the eye-ball, they do not wink at all!—a phenomenon that every pathetiser has witnessed since the days of Mesmer, and one which I will produce for his Holiness any time, whenever he will do me the honor of a call. Persons in a state of somnipathy become wholly insensible to pain; and we have already seen cases, where the most difficult surgical operations have been performed, without the patient’s knowing anything about it at the time.

5. *Surprising positions of the body.* It is mentioned as

another miraculous effort of the Divine power, in the case of these virgins, that their bodies frequently assume very singular positions; as, for instance, one says she

“Had seen Maria raised up in the air so far, at least, as only to touch the bed with the very extremities of the feet.”

The same thing is done by natural somnambulists; and I have made some of my patients, while in a state of somnipathy, assume and maintain the body in a position, which could not be borne in the waking state. In a preceding page is a letter from a natural sleep-waker, who describes feats done by himself in this state, which he was utterly unable to do when wide awake.

6. *Effects of contact with others.* Every pathetist must have noticed the curious effects produced by merely touching persons of this peculiar sensibility, whether they be touched by the operator or any other person. By a mere touch I have, times without number, given to the body of the patient, when awake, any desirable tendency or motion, or even deprived it of the power of locomotion entirely. So it is said of these virgins:—

“The chaplain desired me to touch her hand, when the slightest pressure of my finger upon hers, made her own fall several inches, and put her into a swinging motion from side to side. This movement was considerably increased by the same person blowing at her gently with his breath, so exceedingly ærial and unsubstantial is her frame.”

The above is a specimen of the manner of experimenting, practised by the Papist priests on the “virgins of the Tyrol.”

Again: we know how instinctively some somnopathists shrink from the touch of persons. Just so these virgins:

“During this period, her right arm hung down partly beyond the bed; I touched her hand, when it shrunk from the touch like the leaf of a sensitive plant, and then, like it, remained in the new position which it had assumed.”

7. *Manner of inducing and removing the ecstasy.* I have had numerous patients, who would fall instantly into this state by merely touching them, and some who would sink

into it by merely looking at them; and others, who fell into it when seated in the same chair where they had frequently been put to sleep before. Precisely so these "Virgins of the Tyrol":

"When her confessor [in another place the priests are called "*the keepers of her conscience*,"] sees occasion to require it, she falls *at his bidding* into this state."

And thus she is *brought out* of it:

"Yet, with all this, it requires no effort, no noise, nor hardly any ostensible agency, to break the spell; a gentle touch or whisper from her confessor, or any ecclesiastic with whom she is acquainted, is sufficient to dissolve the charm, completely and at once."

I might trace the *identity* between these cases and the ordinary cases of somnambulism still further, were it necessary. But the above is sufficient to put this fact beyond all doubt in every candid, unprejudiced mind. But the devoted Papist will remind me, that I have not noticed two of the most remarkable miracles described in these cases; and he will ask how I account for the "Stigmata"? For instance, there are plates giving the appearance of these virgins, and one of them is represented as bleeding in the forehead and temples, the outside and inside of the hands, and in the insteps of the feet, and also in the side, in resemblance of the places in the body of our Lord Jesus Christ, where he was wounded when crucified! And we are told, that the blood is seen to ooze from these wounds *every Friday*, and while the patient lies upon her back the blood from the insteps actually runs *upwards towards her toes*, instead of following the laws of gravitation downward. Nor is this the most of this story, for it is added, that one of these virgins "*has neither eat, nor drank, nor slept, for more than eight years!!!*" And to prove this account true, the book refers to another case, where a Papist is said to have lived "*for twenty years in perfect health and strength*," without tasting food at all!!!

All I have to say to these representations is, to affirm their falsehood. And lies so monstrous, puts the shade of doubt on

the other details in this book, though one could otherwise readily admit the truth of many of them, and this, too, without supposing there was anything of the miraculous in them.

The blood may have been produced by themselves, or friends, by punctures or otherwise; or those appearances may have been induced by the laws of sympathy described in a preceding chapter—the same that produced the words, “Napoleon Empereur,” in the eyes of a fœtus some years ago. A state of intense mental effort, long continued, has been known to cause the hair to change from black to gray or white, in a few hours, and to produce other physical changes, remarkable enough to be supposed “miraculous” by those who know no better.*

The case of a lady in Vincennes, Indiana, has been described to me by a scientific gentleman of this city, presenting phenomena every way as miraculous as the foregoing. After some irregularities which had been noticed in her system, she had frequent discharges of hard substances, of the consistency of bone, from directly below the left eye. These discharges left no fissures in the skin, and the bones, as they seemed to be, exuded in a liquid form, and in a moment would fall hard upon the floor.

The case of another lady in Salem, Mass. may be referred to, as exceeding the Tyrol Virgins in the miraculous. For eleven years she has not been noticed to sleep at all; and the various positions into which she is thrown by convulsions, are said to be almost incredible. Sometimes she is elevated from her bed, in an instant, perpendicularly; and at other times pinned to the wall, or made to spin like a top, without the least effort.

* Many of the Papists, who affect to deny that the above cases have any resemblance to somnambulism, cannot certainly be ignorant of the fact, that one of their priests, named F. Girard, was tried in France, in 1733, for the liberties he took with a female, whom he was in the habit of throwing into a state of trance. That female declared, that Girard had bewitched her; and many of her feats, after being thrown into trance by Girard, were as remarkable as anything done by the Tyrol Virgins. Nor was this all. This female had the true “*stigmata*” in her hands, side, feet, and forehead, and which, it is said, the Catholic priest manifested his adoration for, by applying his lips to the places in a peculiar manner, quite too often for his own credit.

My patients possess the power of throwing themselves into these singular conditions. A gentleman, well known in Philadelphia, is remarkable for this susceptibility, as in a few minutes he can voluntarily sink into a state of unconsciousness, precisely like those already described. I had the following account from Dr. Cleaveland, of Providence, R. I. :—

A young lady of that city who had been pathetised, was frequently known to throw herself into this condition, and especially when anything offended her. At one time, she desired the loan of a book of a near neighbor, but which she could not obtain at the time she wanted it. Feeling somewhat piqued, she retired to her room, and throwing herself upon her bed, sunk to sleep. Soon after her friends heard her voice, and on approaching her found that she was repeating something, as if reading. Suspecting what was going on, one of the persons present was despatched to the house where that book was, from which she was supposed to be reading. The somnist soon after stopped her reading, and commenced weeping, in a fit of anger declaring that some one had taken the book away. The person, on entering, declared that she found the book lying on the table, and had taken and removed it into another room. The Bramins in India are said to possess this power; and the case of one is detailed,* who was inclosed in a wooden box for thirteen days without food or drink, and who was actually buried four weeks, and remained without food, and almost without air, in a state of apparent death. He was taken out of his grave perfectly senseless, his eyes closed, his hands cramped and powerless, his stomach shrunk very much, and his teeth so completely jammed together, that his mouth had to be opened with an iron instrument before they could pour a little water down his throat.

A history of almost any ordinary case of *somnipathy* would be the mere repetition of the foregoing facts, and of hundreds of others of a similar character, the accounts of which have been published from age to age, and never doubted by any

* India Jour. Med. and Phys. Science.

one pretending to any knowledge of psychology. But these few cases are given here, to prove the following facts :—

1. That persons of a peculiar temperament are susceptible to the influence of certain agencies, which bring on, at times, a state resembling sleep, in which the external senses are closed.

2. That while in this state, these persons perform actions which they could not do in the normal state.

3. That on suspension of the external senses, there is developed in them an *independent sense*—a sense which sometimes takes accurate knowledge of things present and absent.

4. And yet, at the same time, this sense may be deceived, so that the person may fancy he sees or tastes, or even does things, which have no existence except in his own apprehension.

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CHAPTER XII.

SECOND SIGHT, TRANSPOSITION OF THE SENSES, DOUBLE CONSCIOUSNESS, PRESENTIMENTS, PROPHETIC DREAMS, WITCHCRAFT.

It will answer my purpose to give a specimen of each of these states; and when examined in connection with the laws of sympathy already defined, it is presumed the reader will be at no loss in tracing them to those causes, which, it must be acknowledged, are more or less concerned in their production.

1. SECOND SIGHT.

Many accounts of apparitions, visions, &c. which have been published, are either so palpably false, or so mixed up with superstitious fabrications, that they are not worth a moment's notice. The following details are, no doubt, correctly given, and may be depended upon as a faithful account of what actually took place. It was drawn up by M. Nicoli, of himself, and shows but too plainly, how it was that his susceptibility was wrought upon sufficiently to enable him to have the perceptions he describes:

During the latter ten months of the year 1790, I had experienced several melancholy events, which affected me particularly in September, from which time I suffered an almost uninterrupted series of misfortunes, which afflicted me with the most poignant grief. I was accustomed to be bled twice a year; this was done on the 9th of July, but was omitted to be repeated at the end of the year. Less blood had consequently been evacuated in 1790, than was usual with me; and from September I was constantly occupied in business which required the most unremitted exertion, and which was rendered still more perplexing by frequent interruptions.

In January and February of the year 1791, I had the addi-

tional misfortune to experience several unpleasant circumstances, which were followed, on the 24th February, by a most violent altercation. My wife and another person came into my apartment, at ten o'clock in the morning, in order to console me, but I was too much agitated by a series of incidents which had most powerfully affected my moral feelings, to be capable of attending to them. On a sudden I perceived at a distance of about ten paces, a form like that of a deceased person. I pointed at it, asking my wife whether she did not see it? It was but natural that she should not see anything; my question therefore alarmed her much, and she sent directly for a physician. The phantasm continued about eight minutes. I grew at length more calm, and being extremely exhausted, fell into a restless slumber which lasted about half an hour. The physician ascribed the apparition to violent mental excitement, and hoped there would be no return; but the violent agitation of my mind had in some way, disordered my nerves, and produced further consequences, which deserve a more minute description.

At four o'clock in the afternoon, the form which I had seen in the morning, re-appeared. I was by myself when this happened, and being rather uneasy at the incident, went to my wife's apartment; but there likewise I was followed by the apparition, which however disappeared at intervals, and always presented itself in a standing posture. About 6 o'clock there appeared also walking figures, which had no connection with the first.

I cannot assign any other cause for all this, than a continued rumination on the vexations I had endured, which, though calmer, I could not forget, and the consequences of which I meditated to counteract. These agitations occupied my mind three hours after dinner, just when digestion commenced. I consoled myself at length with respect to the disagreeable incident which had occasioned the first apparition; but the phantasms continued to increase and change in the most singular manner, though I had taken the proper medicines, and found myself perfectly well.

When the first terror was over, as I beheld these phantasms without great emotion, whilst taking them for what they really were—the remarkable consequences of an indisposition, I endeavored to collect myself as much as possible, that I might preserve a clear consciousness of the changes that should inwardly take place in me. I observed these phantasms very closely, and frequently reflected on my antecedent thoughts, to discover, if possible, by means of what association exactly these forms presented themselves to my imagination. I thought at times I had found a clue; but tak-

ing the whole together, I could not make out any natural connection between the state of my mind, my occupations, train of thoughts, and the multifarious forms which now appeared to me, and then again disappeared. After repeated and close observations, and a calm examination, I was unable to form any conclusion relative to the origin and duration of the different phantasms which presented themselves to me. All that I could infer was, that while my nervous system was in such an irregular state, such phantasms would appear to me as if I actually saw and heard them, that these illusions were not modified by any known laws of reason, imagination, or the common association of ideas,—and that probably other people, who may have had similar apparitions, were exactly in the same predicament. The origin of the individual forms which appeared to me, was undoubtedly founded on the state of my mind; but the manner in which it was thus affected, will probably remain as inscrutable as the origin of thought and reflection.

After the first day, the form of the deceased person no longer appeared, but in its place many other phantasms, sometimes representing acquaintances, but mostly strangers. Those whom I knew, consisted of both living and deceased persons, but the number of the latter was comparatively small. I observed, that persons with whom I daily conversed did not appear as phantasms, these representing chiefly persons who lived at some distance from me. I attempted to produce at pleasure phantasms of persons whom I knew, by attentively reflecting on their countenance, shape, &c.; but distinctly as I recalled to my lively imagination the respective shapes of these persons, I still laboured in vain to make them appear to me as phantasms, though I had before involuntarily seen them in that manner, and perceived them some time after, when I least thought of them. These phantasms appeared to me contrary to my inclination, as if they were presented to me from without like the phenomena of nature, though they existed no where but within my mind. I could at the same time, plainly distinguish between phantasms and real objects; and the calmness with which I examined them, enabled me to avoid committing the smallest mistake. I knew it exactly when it only appeared to me that the door was opening and a phantasm entering the room, and when it actually opened, and a real person entered.

These phantasms appeared to me equally clear and distinct at all times and under all circumstances—both when I was alone and when I was in company, as well in the day as at night, and in my own house as well as abroad. They were, however, less frequent when I was in the house of a

friend, and rarely appeared to me in the street. When I shut my eyes, these phantasms would sometimes disappear entirely, though there were instances when I beheld them with my eyes closed; yet when they disappeared on such occasions, they generally re-appeared when I again opened my eyes. I conversed occasionally with the physician and my wife, respecting the phantasms which surrounded me at the moment. They appeared more frequently walking than at rest, nor were they constantly present. They frequently did not appear for some time; but always re-appeared for a longer or shorter period, either singly or in company, the latter, however, was most often the case.

I generally saw human forms of both sexes; but they usually seemed not to take the smallest notice of each other, moving as in a market place, where all are eager to press through a crowd. At times, however, they seemed to be transacting business with each other. I also repeatedly saw people on horseback, dogs, and birds. All these phantasms appeared to me in their natural size, and as distinct as if alive, exhibiting different shades of carnation in the uncovered parts, as well as different colours and fashions of their dress, though the colours seemed to me paler than in real nature. None of the figures appeared particularly terrible, comical, or disgusting; most of them being of an indifferent shape, and some having a pleasing appearance. The longer these phantasms continued to appear, the more frequently did they return, whilst at the same time they increased in number.

About four weeks after their first appearance, I began also to hear them speak. They sometimes conversed among themselves, but more frequently they directed their discourse to me. Their speeches were commonly short, and never of an unpleasant tenor. Several times I saw beloved and sensible friends of both sexes, whose addresses tended to appease my grief, which had not wholly subsided. These consolatory speeches were in general addressed to me when I was alone; sometimes, however, I was accosted by these consoling friends whilst in company, even while real persons were speaking to me. These consolatory addresses consisted sometimes of abrupt phrases, and at others they were regularly connected.

Though both my mind and body were in a tolerable state of sanity at this time, and these phantasms became so familiar to me, that they did not cause me the slightest uneasiness—I even sometimes amused myself with surveying them, and spoke jocularly of them to the physician and my

wife,—yet I did not neglect to use the proper medicines, especially when they began to haunt me the whole day, and even at night as soon as I awoke.

At last it was agreed that leeches should again be applied to me, as formerly, which was accordingly done on the 20th April, 1791, at eleven o'clock in the morning. No one was with me besides the surgeon, but during the operation, my chamber was crowded with human phantasms of all descriptions. This continued without interruption, till about half-past four, just when my digestion commenced. I then perceived, that they began to move more slowly; soon after, their colours began to fade; and at seven o'clock they were entirely white, and moved very little, though the forms were as distinct as before; growing, however, by degrees more obscure, yet not fewer in number, as had generally been the case. The phantasms did not withdraw, nor did they vanish, which previous to that time had frequently occurred. They now seemed to dissolve in the air, whilst fragments of them continued visible a considerable time. About eight o'clock the room was entirely cleared of my fantastic visitors.

Since that period, I have felt twice or three times a sensation as if these phantasms were going to re-appear, without however actually seeing any thing. The same sensation surprised me just before I drew up this account, whilst I was examining some papers relative to these apparitions, which I had drawn up in the year 1791.*

Can it be a matter of doubt, as to the true cause of these visions? And if these sights arise from the derangement of the cerebral functions, is it unreasonable to suppose, that others have arisen from the same cause? By placing my fingers on particular portions of the head, I have often caused my subjects to have similar visions, and which, to themselves, appeared as *real* as any thing they ever saw in the normal state.

2. TRANSPOSITION OF THE SENSES.

The following extraordinary case of catalepsy occurred at Bologna, (Italy,) in 1841, I believe, and was witnessed by Drs. Viscarti, Casina, and Mazzacorati, who published the following account of it. Here we have “vision without the eye,” and that transposition of the senses referred to in the preceding pages of this work.

* Theory of Pneumatology, p. 402.

A young woman, aged twenty-five years, on the 10th of September last, fell into a complete state of catalepsy, which recurred regularly for forty-two days consecutively.

During the first thirty days, the fit began at noon and ended at midnight; but afterwards, it was of less duration. The patient, so long as the paroxysm lasted, presented the ordinary appearances of catalepsy; that is, an aptness to assume and retain all manner of inconvenient and unnatural postures, and a general insensibility to the most forcible physical impressions. * * *

We have said that her body was not capable of feeling the most forcible impressions, nor such as were most calculated to produce pain; but this was not the case with all parts of her body. A most exquisite sensibility remained about the epigastric region, in the palms of her hands, and the soles of her feet. These parts became supplementary organs of the senses, and through them she could receive external impressions, not spontaneously, but only when her attention was roused by the experimenters. At first, it was necessary to speak immediately against the parts that retained their sensibility; afterwards, it was sufficient if the speaker merely touched any one of those parts; and still later, it was enough if he were in communication, though at some distance, with the person who was in actual contact with those parts. She never spoke unless spoken to. When questioned in the manner described, she answered in the same tone of voice that was used by the one who spoke to her; either high or low, or very high. Her power of hearing through those parts, was very extraordinary. If a person, touching her stomach with one hand, grasped with his other the hand of a second person standing further off, and the third and fourth formed in this manner a chain, hand in hand, and the fourth questioned her in the lowest possible tones, she would understand perfectly, and reply in the same tone. The reply continued, always, so long as the contact was maintained with the parts possessing sensibility, and ceased when that contact was interrupted; but she would resume the discourse when the contact was restored, at the point to which it would have reached if there had been no interruption. It seemed, therefore, that the reply was continued internally; and, indeed, when she was asked in such a case, why she had not spoken all the words, she always insisted that she had pronounced them all equally. * *

Her eyes, as we have said, were closed the first twenty-one days; but to be the more assured of their inactivity, the experimenters bound them with a handkerchief well folded, and yet she recognised immediately the color of different bodies that were presented to the parts having sensibility. She could

sometimes read in this way, and could always tell the hour by a watch. Afterward, it was not even necessary that the objects should be in contact with her body; she could tell them in any part of the room; and it was only requisite for this, that the experimenters who were in contact with her, should direct her attention to the proper point. Still later, she recognised and described objects placed in another room, or in the street, or at a distance in places that she had never seen.

Being requested to give a description of a convent at Bologna, and of the vaults under a country house in the neighborhood of that city, of which neither the patient nor her interrogators had any knowledge, she described both minutely; and her description being taken down, was found to correspond exactly with the facts, even including the number and position of the wine vessels in the cellars.

She was once persuaded by a professor of the University, to name the objects that were in a certain cabinet in the college; she complied, and enumerated them exactly. She was asked what was on a certain table there, which was indicated to her: she said, "a book." "And what on the book?" She answered, "A brain." "What brain?" She said, "That of some animal." "What animal?" She replied, that if he would name several, she could tell him which was the animal, and accordingly she told correctly—the animal to which the brain had belonged was a leopard. She declared that she saw distinctly; and she certainly described the internal organs of her own body, and those of other persons. Being subjected by the professor above mentioned to an examination in anatomy, she described with astonishing precision the situation of the heart, the pancreas, the spinal marrow, and the nerves—their connections and uses. And when requested by the same professor to examine the internal condition of his female patient, who lived at some distance, she informed him that the disease was in her womb, and was incurable.

The following account was drawn up by Dr. Duvard, of Caen, and published in the *Gazette Medicale* at Paris, about one year since.

Mademoiselle Melanie has enjoyed good health up to the age of twenty-one, when she began to suffer from dry cough, with pain in the chest and headache; in January 1841, she was attacked on the right side, and since then has continued to suffer from pain in that region; the catamenia now decreased in quantity, and was finally arrested.

In the month of July 1841, I was first called on to visit the patient; she then exhibited all the signs of pleuritic effusion.

After a variety of treatment continued for several weeks, a seton was inserted in the patient's side and she was compelled to have an enema—a remedy which she had previously refused to submit to. A few hours after the administration of the enema she was seized with a most violent attack of hysteria, which continued for several hours. The attacks of hysteria recurred, with the same violence, for several successive days, and seemed to be excited by the ingestion of food, which she continued to eat with avidity, in spite of remonstrances.

Six days after the first attack of hysteria, the patient became suddenly dumb, and continued so for three days, being unable to articulate a single word; on the fourth day she recovered the power of speech, at the termination of a severe hysterical attack; the surprise, however, expressed by those about her at hearing her speak, threw her into a fresh fit, which lasted for three hours, and ended in catalepsy; this was on the 30th of August, 1841. From this period the patient was seized every day with several attacks of catalepsy, alternating with hysteria, and lasting about half an hour.

During the cataleptic accesses there was complete insensibility of every part of the body; the limbs remained in the most fatiguing positions without stirring; the respiratory movements were imperceptible, and the pulsations of the heart which could scarcely be felt, were from 60 to 70 a minute. After a few days the cataleptic fits became longer, and lasted for several hours, being, however, occasionally interrupted for a minute or two, whenever the girl coughed. Sometimes she would turn round in her bed or sit up; at others she would suddenly start up, without opening her eyes, and place herself on the edge of the bed, or on some piece of furniture, in a most fatiguing posture; in this state she would remain, until a fit of coughing came on, or until she was brought back to her bed. Although the eyes were constantly shut, *she avoided every obstacle carefully*, and seemed heedless of risks which would have alarmed any one in a normal state. On one occasion she left her bed during a fit of coughing, ran to the window and opened it; before any one could come to her assistance, she had one foot out of the window, but the cough suddenly ceased, she became cataleptic, and remained in the same position until some people came and placed her in bed.

When the fits of hysteria and catalepsy ceased, the patient recovered all her faculties, and merely complained of fatigue, and her ordinary pain at the side.

Five weeks after the first attack of catalepsy, M^{lle}. Melanie fell several times into a state of natural somnambulism.

She would get up without opening her eyes, walk about her room, arrange her furniture, and enter into conversation with those about her, often mentioning circumstances which she would have wished to conceal; after remaining in this state for several hours, she fell into a state of catalepsy, indicated by apparent suspension of the respiration and complete silence.

On the 12th of October, a few days after her first access of somnambulism, I found the patient in a state of catalepsy. Having placed my hand on the epigastric region, I noticed that her countenance became expressive of pain. I then placed my lips on the pit of her stomach, and asked her several questions; to my astonishment she answered correctly, for although I had read most of the histories of this kind, recorded in different works, I did not believe one of them. During this first examination I made numerous experiments, which led me to conclude that there was a *transposition of the five senses to the pit of the stomach*. On the evening of this day I made fresh experiments, during three hours, in the presence of numerous witnesses, who were not less surprised than myself. In a word, during two months, I renewed the experiments daily and often several times a day, making use of every precaution to avoid deception, and having numerous witnesses around me. I shall now relate, the results of these experiments.

During the cataleptic state the muscles presented three different conditions:—Sometimes they were all relaxed, and the limbs could be placed in any position, which they retained, however fatiguing the posture might be; at other times all the muscles were in a state of rigid contraction; at others again they were relaxed, and the limbs fell down when raised from the body.

There was no sensibility in any part of the body, except over the pit of the stomach, the palms of the hands, and soles of the feet. Thus we might pinch the skin or pierce it with pins, pull out the hair, tickle the nose, &c., without eliciting any sign of feeling. On the contrary, if the pit of the stomach, soles of the feet, or palms of the hands were touched, even with the point of a feather, the girl immediately withdrew the part touched, and her countenance indicated displeasure. When a Leyden jar was placed in communication with the parts just named, she had a violent commotion, or was suddenly awakened, but the jar might be discharged on any other part of the body without producing the slightest effect.

The ears appeared to be insensible to sound, the loudest noise did not attract her attention; but when a small bell was agitated over the sensitive parts, her countenance show-

ed she heard the noise. If the lips were placed in contact with the sensitive parts, she heard every thing that was said, although the voice was so low that it could not possibly reach her ears. Her answers were delivered in an exceedingly low tone, and generally speaking, the person appointed to catch them would repeat them without hearing the question asked.

The patient never spoke, except when her limbs were in a state of relaxation; during the rapid cataleptic state the tongue and organs of speech were immoveable.

The senses of taste and smell were not exercised by their natural organs, but were very acute in the sensitive parts. Thus we filled the nose with assafoetida, or tobacco; placed bottles of ether, concentrated ammonia, &c., under the nose without producing the least effect; but when a small portion of a sapid body was placed in contact with the sensitive parts *the patient distinguished it at once*. Thus she recognised and named, one after another, the syrups of poppies, vinegar, gum, and capillaire, wine, water, orange flower water, Seidlitz water, currant jelly, &c., although only one or two drops of each substance was placed on the palm of her hand. When a few grains of snuff were placed on the sole of her foot, she sneezed at once, and thus easily distinguished at once French snuff from English snuff.

Although the results of my first experiments induced me to think the sense of vision was transposed as well as other senses, subsequent trials showed that what I had regarded as vision, was nothing more than an exquisite sense of touch. When an object was placed on any of the *sensitive points*,* and she was asked if she saw it, she answered 'Yes,' and immediately named the object if she was acquainted with it, or if not gave a correct description of the body. Thus she always detected a watch, when placed over the pit of the stomach, and never failed to tell whether it was made of gold or silver, going or stopping. If asked the hour, she would answer pretty correctly as to the *true* time of day; but if the hands of the watch were designedly changed, she always failed to tell the time they marked. She could distinguish and name every kind of French coin placed in her hand, but not the name of the sovereign in whose reign they were struck; she could distinguish a bit of silk from a bit of cloth, but not their respective colors.

At the second sitting, she succeeded in spelling the word *commerce*, written in large letters, and placed upon the pit of the stomach; this required considerable efforts, and she com-

* What I have called the "sympathetic points."

plained for a long time of fatigue; in subsequent experiments however, she was never able to distinguish any of the letters of the alphabet, when placed in contact with sensitive parts. Whenever I asked her to point out the seat of her disease, and indicate to us the appropriate remedies, she refused—answering that such was my business, and not hers.

I have seen the foregoing account published in the London Medico-Chirurgical Review, New-York Lancet, and other medical works, without a word of doubt. But the same state, induced by pathetism, would be treated as humbuggery.

3. DOUBLE CONSCIOUSNESS.

I know a lady, who tells me she is frequently conscious of being transferred, as it were, from one state to another, altogether different, each of them having feelings and perceptions of things entirely different from each other.

A case was published in the Medical Repository a few years ago, of a lady who fell into a profound sleep; and when she waked up, she was found to have lost all recollection of her previous life, even her memory of words and things was gone, so that she had to learn every thing anew. And, after studying for some time to acquire the use of words, she again fell into a state of somnium, and on awaking from this she remembered every thing she had forgotten after the first fit of sleeping; and what was still more singular, she now forgot every thing which had transpired after the first attack. And for a series of years she alternately passed from one of these states to the other, in one of which her memory of things was entirely distinct from the other.

Dr. Devan read to the Royal Society of Edinburgh, in February, 1822, the history of a case, observed by Dr. Dyer of Aberdeen, in a girl 16 years old, which lasted from 2d of March to 11th of June, 1815. The first symptom was an uncommon propensity to fall asleep in the evenings. This was followed by a habit of talking in her sleep on those occasions. One evening she fell asleep in this manner: imagining herself an episcopal clergyman, she went through the ceremony of baptising three children, and gave an appropriate prayer. Her mistress shook her by the shoulders, on which she awoke, and appeared unconscious of everything, except that

she had fallen asleep, of which she showed herself ashamed. She sometimes dressed herself and the children while in this state, or, as Miss L. called it, 'dead asleep;' answered questions put to her in such a manner as to show that she understood the question; but the answers were often, though not always, incongruous. One day in this state she sat at breakfast, with perfect correctness, with her eyes shut. She afterwards awoke with the child on her knees, and wondered how she got on her clothes. Sometimes the cold air awakened her; at other times she was seized with the affection whilst walking out with the children. She sang a hymn delightfully in this state; and from a comparison which Dr. Dyer had an opportunity of making, it appeared incomparably better done than when awake. In the mean time a still more singular and interesting symptom began to make its appearance. The circumstances which occurred during the paroxysm were completely forgotten by her when the paroxysms were over, but were perfectly remarked during subsequent paroxysms. Her mistress said, that when in this stupor, on subsequent occasions, she told her what was said to her on the evening when she baptised the children. A depraved fellow servant, understanding that she wholly forgot every transaction that occurred during the fit, clandestinely introduced a young man into the house, who treated her with the utmost rudeness, whilst her fellow servant stopped her mouth with the bed-clothes, and otherwise overpowered a vigorous resistance which was made by her even during the influence of her complaint. Next day she had not the slightest recollection even of that transaction; nor did any person interested in her welfare know of it for several days, till she was in one of her paroxysms, when she related the whole fact to her mother. Next Sunday she was taken to church by her mistress, while the paroxysm was on her. She shed tears during the sermon, particularly during the account given of the execution of three young men at Edinburgh, who had described, in their dying declarations, the dangerous steps in which their career of vice and infamy took its commencement. When she returned home, she recovered in a quarter of an hour, was quite amazed at the questions put to her about the church sermon, and denied that she had been to any such place; but next night, on being taken ill, she mentioned that she had been to church, repeated the words of the text, and, in Dr. Dyer's hearing, gave an accurate account of the tragical narrative of the three young men, by which her feelings had been so powerfully affected.*

* Dr, Spurzheim, Phren. p. 78, sqq.

A number of similar cases were stated before the Royal Medical and Chirurgical Society, Feb. 28, 1843. One by Dr. Webster, of a patient who believed himself to be another person, at the same time. In one state, he disavows the opinions and proceedings of the second state; and in the second state, inflicts punishments upon the body of the first, for imaginary offences, and designates himself as another by bad names and abuse.

Another case was referred to by Dr. Mayo, which lasted for several months, and seemed to have been caused by the woman's swallowing some ointment containing gunpowder. In one state this woman learned and said things, which she was quite incapable of doing in the other. In one state she was pert and impudent, and in the other modest and retiring.

This double consciousness is peculiar to many somnithipathists. I have one patient, who does not remember, when asleep, that she was ever in any other state; and forgets all she sees in her sleep, as soon as restored to the waking state.

6. PRESENTIMENTS.

Presentiment is an anticipation of something about to take place, to ourselves or friends. All that is real of these forebodings, may be traced to those mysterious laws of sympathy, which do, unquestionably, sometimes extend to minds at a distance, and thus make impressions upon that independent *sense*, which is more or less developed in persons of a peculiar temperament, as we have before seen. Nor is there any more difficulty in this supposition, than in the science of optics; for, through what medium is it, that the mind perceives those bodies which are at such immense distances from this earth, that it must have taken their rays of light more than *thirty thousand years* to reach the optic nerve? And yet these rays, after a journey of so many thousands of years, establish a relation between those bodies and the human mind, by which we have perceptions of these distant bodies.

I have already referred to a cerebral organ, which I have called Prevision. When excited, it does seem, sometimes, to give a most remarkable perception of distant contingencies;

nor is it at all unreasonable to suppose the necessity of such an organ, if "holy men of old" were once inspired of God to foretell future events. I do not mean to be understood as saying, that we could "inspire," in the same sense, any one to foretell future events, or that the prophets were inspired by pathetism. What I mean is, that if the Holy Spirit inspired the prophets to foretell, or have perceptions, of future events, it proves that there is an organ appropriated to this function—the same as we have one for *Truth*, another for *Hope*, and another for *Love*. For, how could man be made to do things, for which he had no appropriate *organ*?

I suppose the organ of Foresight to be located in the frontal region, between the organs of Causality; and when it is largely developed, or excited in an extraordinary degree, it may be reached from the laws of sympathy, from various causes.

An intelligent gentleman of this city, and one, by the way, as little given to the belief in dreams as any one I ever knew, gave me the following account. Business rendered it necessary for him to visit Albany. But, for some reasons to him altogether unaccountable, he felt very much disinclined to go. After vacillating for some time, he finally took one of the evening boats, and at the usual hour retired in his berth. He soon fell asleep, and dreamed that he saw his wife pale, and scarcely alive from the loss of blood. She was so near dead, that she had become quite cold, and he built a fire, that by warming the body he might bring her to life again. The sight so distressed him, that it waked him up; but on falling again to sleep, he had precisely the same dream again. The cause of his wife's having bled to death he did not perceive, but it now appeared that she was cold and dead, from the loss of blood.

On waking in the morning, he found it impossible to banish the impression which these dreams had made upon his mind; and soon after reaching Albany, he received a letter summoning him to return, and stating that his wife, within one hour after his departure, had met with an accident, from which she had well nigh flooded to death. On returning, he found that

she had, indeed, been so near dying, that the physicians and friends had given her up, supposing that nothing could by any means save her life.

When he left her, he had not anticipated anything of the kind, and is not conscious that such an accident ever entered into his mind. And I should add, that this gentleman has no faith in *clairvoyance*.

Now, if this were a solitary case, we could merely say it was quite remarkable. But, when viewed in connection with numerous others still more remarkable, it does not seem altogether unreasonable to suppose, that there may be in these cases certain sympathetic laws, which operate upon two or more minds at the same time in giving presentiments of what is passing, or about to take place, in other places. The following cases will illustrate these laws :

Junge Stilling, in his Almanac of 1808, relates a remarkable presentiment of a minister, who was taking a walk with the intention of visiting a rocky mountain near his house, and of enjoying the beautiful view from it. While approaching the summit of the mountain, he felt restless and uneasy ; unable to explain this feeling, he asked himself, whether it was right for him to spend his time thus idly, and, busied in such thoughts, he stepped aside for a moment to seek a cool place under a wall formed by the rock. He had scarcely left the narrow path leading to the top of the mountain, when a large stone, breaking loose from the rest of the rock, with great vehemence struck the spot where one moment before he was standing.

The Rev. John Dodd, one evening, when already undressed, felt a great agitation in his mind, which was altogether unaccountable to him. It seemed to him, that he ought to go and visit a friend, who lived a mile or two off from him. His family tried to dissuade him from going that night, but their efforts were in vain. Mr. Dodd went, dark as it was, and on arriving at the house of his friend, he found him ready to commit suicide. His unexpected visit and counsel prevented the deed for ever, and his friend became converted by divine grace.

Schiller, the great poet, was in the habit of walking with his steward. At one time, when passing on a rugged path through a pine wood and between high rocks, he was seized by a feeling that some person must be buried there. Some

time after, he was informed of the murder of a wagoner committed at the place, of which he had the presentiment.*

5. PROPHEPIC DREAMS.

The same sympathetic laws which influence the susceptibility so as to give obscure perceptions of future contingencies, may affect the mind during sleep, as is proved by what have been called prophetic dreams. The murder of Mr. Adams, in this city, some two years since, by J. C. Colt, was anticipated by the wife of the former, before it took place.—Two days before her husband's disappearance, she dreamed, twice, that he was murdered, and that she saw his body cut into pieces and packed in a box. The dreams gave her great concern, from their vividness; and she went once to relate them to her mother, but did not, from the apprehension of being laughed at.†

The following is quoted from the London Times of August 16, 1828:—

In the night of the 11th of May, 1812, Mr. Williams, of Scorrier house, near Redruth, in Cornwall, awoke his wife, and exceedingly agitated, told her, that he had dreamed that he was in the lobby of the House of Commons, and saw a man shoot with a pistol, a gentleman who had just entered the lobby, who was said to be the chancellor: to which Mrs. Williams naturally replied that it was only a dream, and recommended him to be composed, and go to sleep as soon as he could. He did so, and shortly after again awoke her, and said, that he had the second time had the same dream; whereupon she observed, he had been so much agitated with his former dream, that she supposed it had dwelt on his mind, and begged of him to try to compose himself, and go to sleep, which he did. A third time the vision was repeated; on which, notwithstanding her entreaties that he would be quiet, and endeavor to forget it, he arose, being then between one and two o'clock, and dressed himself. At breakfast, the dreams were the sole subject of conversation; and in the forenoon Mr. Williams went to Falmouth, where he related the particulars of them to all of his acquaintance that he met. On the following day, Mr. Tucker of Trematon Castle, ac-

* Rauch's Psychology, p. 132.

† Commercial Advertiser of Oct. 11, 1841.

accompanied by his wife, a daughter of Mr. Williams, went to Scorrier house about dusk.

Immediately after the first salutations, on their entering the parlour, where were Mr., Mrs., and Miss Williams, Mr. Williams began to relate to Mr. Tucker the circumstances of his dream; and Mrs. Williams observed to her daughter, Mrs. Tucker, laughingly, that her father could not even suffer Mr. Tucker to be seated, before he told him of his nocturnal visitation: on the statement of which, Mr. Tucker observed, that it would do very well for a dream to have the chancellor in the lobby of the House of Commons, but that he would not be found there in reality; and Mr. Tucker then asked what sort of a man he appeared to be, when Mr. Williams minutely described him; to which Mr. Tucker replied: Your description is not at all that of the chancellor, but it is certainly very exactly that of Mr. Perceval, the chancellor of the exchequer; and although he has been to me the greatest enemy I ever met with through life, for a supposed cause, which had no foundation in truth, (or words to that effect,) I should be exceedingly sorry indeed to hear of his being assassinated, or of an injury of the kind happening to him. Mr. Tucker then inquired of Mr. Williams if he had never seen Mr. Perceval, and was told that he had never seen him, nor had ever even written to him, either on public or private business; in short, that he never had any thing to do with him, nor had he ever been in the lobby of the House of Commons in his life. Whilst Mr. Williams and Mr. Tucker were still standing, they heard a horse gallop to the door of the house, and immediately after Mr. Michael Williams of Treviner (son of Mr. Williams of Scorrier) entered the room, and said, that he had galloped out from Truro, (from which Scorrier is distant seven miles,) having seen a gentleman there, who had come by that evening's mail from London, who said that he had been in the lobby of the House of Commons on the evening of the 11th, when a man called Bellingham had shot Mr. Perceval; and that as it might occasion some great ministerial changes, and might affect Mr. Tucker's political friends, he had come out as fast as he could, to make him acquainted with it, having heard at Truro, that he had passed through that place on his way to Scorrier. After the astonishment which this intelligence had created, had a little subsided, Mr. Williams described most particularly the appearance and dress of the man that he saw in his dream fire the pistol, as he had before done of Mr. Perceval. About six weeks after, Mr. Williams having business in town, went accompanied by a friend, to the House of Commons, where, as has been already observed, he had never before been.

Immediately that he came to the steps at the entrance of the lobby, he said, 'This place is as distinctly within my recollection, in my dream, as any room in my house;' and he made the same observation when he entered the lobby. He then pointed out the exact spot where Bellingham stood when he fired, and which Mr. Perceval had reached when he was struck by the ball, and where and how he fell. The dress, both of Mr. Perceval and Bellingham, agreed with the descriptions given by Mr. Williams, even to the most minute particular.

The Times states, that Mr. Williams was then alive, and the witnesses, to whom he made known the particulars of his dream, were also living; and that the editor had received the statement from a correspondent of unquestionable veracity.

Dr. Binns, after relating the case of Dr. Walker, of Dublin, who was buried alive, observes—

"Here is a man who, as it were, possessed an instinctive knowledge that he should be buried alive, and who was so convinced of it, that he wrote a treatise, with a view if possible to avert so horrid a calamity; and still farther to assure himself, entered into a compact with a second party, for the fulfilment of certain precautions before he should be consigned to earth, yet, disappointed in the end, and compelled to bow to the inscrutable fiat of that law of natural contingencies which the imaginative Greeks erected into supertheism, and consecrated by the tremendous name of Destiny."

The following case is quoted by the same author, from Dr. Abercrombie, who states, "that its accuracy may be relied on in all its particulars."

Two sisters had been for some days attending their brother, who was suffering from a common sore-throat, severe and protracted, but not considered dangerous. At this time one of the sisters had obtained the loan of a watch from a friend, her own being out of repair. As this watch was a kind of heirloom in the family of the lady from whom it had been borrowed, particular caution was given lest it should meet with some injury. Both of the sisters slept in a room adjoining that of the brother's, and one night the elder awoke the younger in extreme alarm, and told her that she had dreamed that "Mary's watch had stopped," and that when she had

told her of it, she had replied—"Much worse than that had happened, for Charles's breath had stopped also." To quiet her agitation, the younger immediately arose, proceeded to her brother's room, found him asleep, and the watch which had been carefully put away in a drawer, going correctly. The following night the same dream occurred, accompanied by the same agitation, and quieted in the same manner—the brother being sound asleep, and the watch going. In the morning, after breakfast, one of these ladies having occasion to write a note, proceeded to her desk, while the other sat with her brother in the adjoining room. Having written and folded the note, she was proceeding to take out the watch which was now in the desk, to use one of the seals appended to it, when she was astonished to find it had stopped, and at the same instant a scream from her sister hurried her to the bed side of her brother, who, to her grief, had just breathed his last. The disease was considered to be progressing favorably, when he was seized with a sudden spasm, and died of suffocation. The coincidence between the stoppage of the watch and the death of the brother, is the most perplexing circumstance of the case, since the mere stopping of the watch, or the death of the brother, might have been explained on very rational principles; or had the watch stopped before or after the death of the brother, it might have been easily supposed to have been forgotten to be wound up; or it may have suffered some injury from the hurry and trepidation incidental to anguish and bereavment, but as the case is related, it is certainly a most extraordinary, surprising, and mysterious incident.

In the Life of Sir Henry Wotten, by Isaac Walton, there is a dream related of Sir Henry's father, Thomas Wotten. A little before his death, he dreamed that the University of Oxford was robbed by townsmen and poor scholars five in number; and being that day to write to his son Henry, at Oxford, he thought it worth so much pains as by a postscript to his letter to make a slight inquiry of it. The letter was written from Kent, and came into his son's hands the very morning after the night on which the robbery was committed; for the dream was true, and the circumstances, though not in the exact time, and by it such light was given to this work of darkness, that the five guilty persons were presently discovered and apprehended. Walton also says, "that Thomas Wotten,

and his uncle Nicolas Wotten, who was Dean of Canterbury, both foresaw and foretold the day of their deaths."

Dreams of this kind have been known from the earliest ages of the world; and some of the most remarkable instances of which may be found recorded in the Bible, Genesis xxxvii. 5—36.

6. WITCHCRAFT.

Did the limits of the present work admit of it, it would be an easy matter to explain all the mysteries of witchcraft, by the laws of the human mind developed in a preceding chapter. Take, for instance, the case of the woman who consulted the fortune teller, and who actually died the next day, according to his prediction. Or, the cases of the children in Holland, who were seized with sympathetic convulsions; or either of the fanaticisms before referred to; and notice, how they were spread by sympathy, or by excitement, or fear.—The susceptibility becomes highly developed, and moulded into almost any shape, which the fanaticism or whims of the affected ones may please to give it.

There is not a case of witchcraft upon record, but which would confirm this statement.

What more likely to bewitch an ignorant, fearful, and perhaps a highly susceptible person, than to charge him with witchcraft, as many have been, from envy or hatred? The bare *suspicion* spreads from ear to ear, and strikes terror throughout the neighborhood and country where the belief in witches obtains. The suspected person is shunned, as being worse, if possible, than the devil himself; and the horror and fear attendant on the mere suspicion of a crime so monstrous, and dreadful in its effects, prostrates all before it, and leaves nothing but fear and *witchery* in its train.

CHAPTER XIII.

CLAIRVOYANCE.

Nothing, perhaps, has tended more to check the confidence of intelligent people in Pathetism, than the assumptions which have been put forth, at different times, in behalf of what has been called Clairvoyance. Nor is it at all surprising that persons, not familiar with the laws developed in such cases as have been detailed in the preceding chapter, should be stumbled at these assumptions, and refuse their credence to reports which, to them, are as really extravagant, as if they asserted the actual resurrection of the dead. The human mind, when well balanced in the cerebral developments, is not to be convinced in this way; and hence, it is quite unphilosophical to attempt to bring it over, by appeals, merely, to the organs of marvellousness, or belief. The intellect must first be informed—we must first have an apprehension of the laws of mind, and be able to see how it is, that the mind obtains its perceptions in a waking normal state, before we can readily admit its power of seeing without the use of the eye.

In order to fully understand the human mind, and as far as possible, the nature of its capabilities and exercises, of course we must examine it in its different states. We must dissect, as it were, its numerous phenomena; we must examine it in its sleeping state; we must analyze its operations when they are manifested through a diseased brain; we must know how different states of the nervous system affect its mysterious agency, and be able to show the difference between the results of morbid and healthy cerebral action. And hence it becomes an inquiry, of the utmost importance, as to what kind of action the brain is subjected in the production of clairvoyance. Is it morbid, or healthy?

Human knowledge is the conscious perception of any positive or relative existence. But this consciousness may exist

in various degrees in different persons, and in different degrees in the same person at different times, according to the size and proportions of the mental organs. Undoubtedly it must exist in the greatest perfection in those persons, where the cerebral developments are the nearest to perfection, not only as it respects their size and proportion, but as it regards their healthy exercise. It is therefore manifestly evident, that knowledge must be highest in those cases, where the brain is of the necessary size, and where the organs are properly balanced, and sufficiently exercised with healthy action; and we must admit the *competency* of the human mind in a waking state, where the mental organs are thus properly developed and balanced, to determine on the question whether any given proposition be true or false. We cannot allow that the human mind may ever set up a standard of its own attainments, in any but a healthy waking state. To admit the reverse of this would be opening the door for the annihilation of all knowledge, without leaving us any available use of either sense or perception.

The question is not whether the mind, in a state of somniphathy, may not have a perceptions of facts, which it could not know in the waking state; but it is as to whether the knowledge said to be obtained in this state, should form a standard by which all other knowledge possessed by the human mind, in a waking state, should be tried and judged? That is, shall we judge of the knowledge said to be possessed by a person in this sleep, by the knowledge we have of the mind, and the nature and limits of evidence in the waking state, or shall we judge of the latter by the former?

We have seen, that there are certainly two kinds of sleep. At least the nervous system of certain persons, is susceptible of being put into a state, which in many respects resembles sleep, enough to be designated by this term. And many have noticed the phenomena peculiar to somnium or somnambulism, who wholly reject all that is said to be peculiar to a state of somniphathy, and this, too, when it will be seen, at once, that there is scarcely anything more remarkable in the latter than has often been known to occur in the former state.

But in regard to the *induced* clairvoyance of which such marvellous stories have been circulated, there are many things to be taken into the account, which should not be overlooked, especially by those who think they have penetrated, by this agency, as it were, into the secrets of another world. When this subject becomes better understood, it will not, perhaps be a matter of so much surprise, that different operators have been so frequently deceived as to the real nature of the phenomena which they may have, in some form or another, been the means of producing. There is something quite captivating in many of the aspects which this subject often assumes. Of the reality of "the human influence" there can be no reasonable doubt. Where it is used for the relief of human suffering, or in those cases where a state of sleep is produced, the mind of the operator is frequently taken by surprise, and carried so far from its true bias, that it becomes quite ready to receive, as equal realities, whatever may be, in any way, associated with this strange state.

The facts detailed in the preceding chapters of this work, are sufficient to demonstrate, beyond all question, that man has a faculty, or sense, which in some cases sees, or has accurate perceptions of things, without the use of the external senses. Is it not this *sense* which guides the feathered tribes in their migrations from one hemisphere to another? Is it not this sense which guides the ox in selecting two hundred and seventy-six kinds of herbs, and, at the same time, teaches him to avoid two hundred and eighteen, as unfit for food? A species of spider digs a hole in the earth, about two feet deep, and closes it with a curious trap door, so as to deceive and keep out every intruder. The tortoise, though hatched a mile from the water, no sooner leaves its shell, than it runs directly to the ocean, without a guide. The *sphinx fabulosa*, as if moved by a prophetic instinct, prepares little cells in the earth, then she fetches spiders and deposits one with each egg, that the little ones may have food as soon as they break forth from the shell. All animals, without instruction, move with perfect skill from the time of their birth, from one place to another; and they use their limbs, and select their

food at the proper time and place. Mix salt and arsenic, and it is said a sheep will select the former from the latter, a thing which man could not do.

A gentleman on one of the wharves at Edgartown, Mass., noticed a large spider floating on a chip; the tide was running out of the harbour, and the wind blowing on shore, and the spider after surveying all parts of his vessel, found himself near the outer corner spile of the wharf, when, perceiving that he should soon drift by, he immediately began to spin his web. The threads were fortunately blown against the spile and firmly fixed. Having thus succeeded in making fast to the wharf, the ingenious *voyager* hauled along side and landed in safety.

This sense has been called *instinct*, but it demonstrates the power of *sensation* and *perception*, as really as these powers are known to exist in the human species. True, for the exercise of *perception* in man, we have the largest cerebral developments, the strength and activity of which depend on the power of the vital forces, and the balance of the sympathetic laws before referred to; and that this *perceptive* power in man is sometimes most extraordinarily developed, and transposed from one part of the system to another, is well known. In diseases of the nervous system, persons have been able to see without the use of the eyes, and to do things which they could not do when in a healthy or waking state. And cases have often occurred, where persons long sick, and enfeebled with disease, have, all at once, become so strong by an excitement of the cerebral system, as successfully to resist the strength of two or three able-bodied men. The nerves and muscles, in such cases, seem to possess superhuman power, and the brain to be endowed with a most unaccountable susceptibility.

The cases before the reader are abundantly sufficient to show, that what we call *clairvoyance* is simply the exercise of this sense, which is spontaneously developed in cases of disease or nervous derangement. And, though I doubt not but I have witnessed what would be considered some of the most remarkable cases of induced clairvoyance ever known,

yet, I should not be willing to assume beforehand, that one person out of the whole would describe, without any mistake, what neither of us knew any thing about, till the time the description was given. True, I have had many such descriptions; but they have been given under circumstances which have taught me to be careful how I presume upon this power, or report accounts of its exercise which will not bear the most rigid investigation.

There are so many chances for mistakes, and there may be so many disturbing causes, that I never like to give descriptions from somnipathists, as demonstrative evidences of *clairvoyance* to those who know nothing of this phenomenon.—Descriptions of what is in the *mind* of the operator might be evidences of clairvoyance to him, while it would not be evidence to any other person. But these accounts, in order to satisfy others, should be made of things under the following circumstances:—

The patient should repeatedly describe accurately, what no other person present knows, or what all the persons present know; that neither the patient nor operator had any previous knowledge of; and the things described should be examined *immediately* afterwards by all who heard the description, that they may see and judge of its accuracy.

I have before stated, that I have frequently rendered persons clairvoyant, as it is called, without putting them into a state of sleep; and in some of these cases their descriptions were accurate, as near as could be ascertained, as much so as those of persons perfectly asleep.

I have long been fully satisfied, that the most appropriate and perhaps the only proper application of this power, is to the description and cure of disease, and to the delineation of *MIND*, and the best methods for its development; as it is nothing more or less than the exercise of that *sense* by which we become *cognizant* of *mind* and things; that sense by which we obtain knowledge of every thing which is knowable, and which seems to be peculiarly adapted to the investigations which relate to the human system.

There are two considerations which have produced the

conviction above stated. The first is, that all persons in a state of *somnipathy*, as well as those called natural sleep-wakers, have always been known to describe diseases, and the physiology of the human system, better than they could describe anything else. Every person who is familiar with the induced sleep, will agree in this statement. I have had the testimony of some of the best and most experienced pathetisers, to this fact. They all agree, that their subjects describe, with the greatest ease and accuracy, when their attention is directed to the human body for benevolent purposes. It is true, some allowance should be made for the manner in which patients have been educated, as somnipathists may be trained into *habits* of doing various things; but I am certain that when this sleep follows an effort for their own or another's good, they will be more accurate in describing disease or the mental powers, of themselves or others, than in their descriptions of anything besides. If I am right in this supposition, it follows that it is a perversion of this faculty when it is made to attempt descriptions of various articles, merely to gratify an idle curiosity. And it may account for the numerous failures which always occur in the attempts to produce what is called *clairvoyance*; as we know but few of what are called *clairvoyants*, have ever been able to give descriptions of *things* which neither they nor the operator ever saw, which were strictly true. Two thirds of these may be set down as failures, and half the other third will be found to be wholly or partially untrue, while the remainder is given in such terms as often forbid our setting the description down as plain, *unmixed* matter of fact.

The other consideration to which I have alluded is the fact that most somnipathists are not only averse to any attempts at clairvoyance of things, but these attempts not unfrequently are followed with injury to the patient. An operator called on me a short time since, to relieve a patient from a fit of *insanity*, brought on by his attempt to make her clairvoyant; but no such mischiefs follow the legitimate application of this agency. Where you find a somnist or one in a state of somnipathy, their descriptions of disease, and of the men-

tal character of others, will be spontaneous, or follow the wish of the operator provided the patient be properly managed. One of the first phenomena noticed by Puyseger, (the first who produced a state of somnipathy of whom we have any account), was the knowledge which his patient seemed to have of his own disease; and from that time to the present it has been found, that all persons in this state more readily describe their own or another's disease, or the mental dispositions of others, than any thing which is not connected with the health or character of any one. I have subjects at the present time, who describe diseases with an accuracy truly astonishing, and what is still more remarkable, they describe the diseases of persons whom they never saw. One lady in this city has described accurately the cases of numbers of persons, whom she never saw, and of whom she knows nothing in the waking state; and of part of this number, I knew nothing at the time.

Sometimes we have the persons present who are to be examined. In these cases, the somnipathist puts his hands on the head, and traces from different portions of the brain to the parts affected; and seldom have I ever known them to fail in finding and describing *the* difficulty which constituted the disease; and this they have often done when physicians had failed altogether in their attempts to tell what the malady was, and also in their attempts to remove it. They tell me, also, in many cases what will prove the most successful in effecting a cure; and I could produce the testimony of scores whom I have examined in this way, who would affirm that these descriptions of their cases by a person in the somnipathic state, were more correct and satisfactory than any they ever had from physicians or others.

In this way I have obtained the most remarkable and accurate delineations of character and the mental powers of different persons. This may seem to be mere fancy to some, I know, but I speak the words of truth and soberness.

The first thing of this kind that attracted my attention was the fact, that one of my subjects never failed to tell me the *feelings* and *peculiar dispositions* of every one who was put

in communication with her; and some time after I had commenced the course of cerebral experiments heretofore described in this work, I found one of my patients excessively fond of putting his hands on the head of different persons, and when he did so he instantly *sympathised* with them in the feelings of the different organs.

The following is a specimen: it is from the minutes of my experiments commenced in December, 1841. It is the description of the head of a lecturer on phrenology, who was present, and who had for the first time the day before, witnessed the excitement of the phrenological organs by pathetism. After having given a correct description of his head, she gave a specimen of the controversy which had been going on during the day between his mental organs, on the truth of what he had seen:—

Causality. "I don't know about it—I must examine it further."

Faith. "Yes, it is true."

Conscience. "But is it *right*?"

Human Nature. "I don't know, there may be deception in all this."

Acquisitiveness. "Can I make any thing by magnetism? How will it affect my purse? can I make money by it?"

Faith. "Yes, I must believe it."

Causality. "Hold, I must inquire more about it."

Comparison. "Wait till I can compare it with other things I know, and then I can tell better."

Mirth. "Ha, ha, ha! Faith has the majority."

"The organs had been in such a conflict, that his brain is much heated and excited."

Language of Ideas. "Says nothing, but like the girl's beau, looks glorious thoughts."

The gentleman bore us witness, that he was both amused and not a little surprised, on hearing the thoughts of his mind, which he himself had never uttered, so correctly described by another.

Nor is this power confined to persons in a state of somnopathy, or natural somnambulism. Persons have been known

in different ages, who have possessed a remarkable faculty for arriving at a knowledge of the diseases and characters of others. In some this faculty seems to be natural, and in others to have been acquired.

The following are a few of the many cases of my own, which may be taken as specimens of the manner in which this faculty is exercised.

Mr. T. applied to me, saying he had consulted physicians in vain for some years, and was still at a loss in determining what the cause of the difficulty was under which he was suffering. Nothing was said to me of his symptoms. He retired, with the promise of calling again the following day.—On consulting my patient, he at once said he saw the person to whom I referred, and described him as follows:—

Tall, small stature, light complexion, thin light hair. His brain is somewhat diseased, but *the* difficulty of which he complains, is a pain located in the calf of the right leg. It is quite painful at times, and was caused by taking mercury some years ago. My patient, among other prescriptions, mentioned the medicated vapor bath.

On calling the next day, Mr. T. declared the description to be literally correct.

About three weeks after Mr. T. called again, and on urging the privilege of an examination of another case, when he might be present, the arrangement was made accordingly.—The time and place having been agreed on, he came, but was not introduced to my patient. After putting the latter in a state of somnopathy, I asked him if he saw any body in the room with us? He answered, no. I then directed him to look in the direction in which Mr. T. was sitting, and at once he said, "Oh, this is the gentleman whom I examined some weeks ago, and who had the pain in the right leg. Oh, he is better, much better now; he has done as I directed him to; see, he is quite cheerful." The eyes of the patient were fast closed all this while. Mr. T. testified to the truth of what was said; and then handed me a lock of hair. The patient refused to touch the hair, but readily gave the following description of the person to whom it had belonged:—

"It is from the head of a man. He seems to be a Christian, a minister of the Gospel. He is troubled with a difficulty in his speech, he speaks in a monotonous tone of voice. His throat is affected with—what do you call it? [I said, *bronchitis*?] Yes, that is it. His throat is very much inflamed. He is not in this city, but is at a distance. He has been in the habit of taking some kind of stimulants, I should think tea and coffee, perhaps, and speaking in crowded rooms. He is very firm and self-confident." This account Mr. T. declared to be literally correct; and he affirmed, that that person had long been known to be a most inveterate tea-drinker, and his monotonous style of speaking was known to every one who had ever heard him; and as an evidence of his self-confidence, he mentioned his boasting of his having carried his views against overwhelming opposition, in a recent meeting of the American Bible Society in this city.

An intelligent lady applied to me for information about her own health; but without giving me any idea as to what it related. On putting my patient to sleep, she described the lady, and stated distinctly what it was she wanted to know. On giving this account to the lady, she was quite overcome, and confessed the account was of the precise matter concerning which she wished to be informed.

A lock of hair was sent me from Providence, R. I., with a request that one of my patients should describe the person to whom it had belonged. There were two physicians present on making the examination, and one of them took down the following description from the lips of the somnopathist. She refused to touch the hair, and begged that it might not be put into her hand. However, I placed it in contact with her hand, and she immediately became convulsed from head to foot. She cried, and acted strangely, as if deranged. In a moment she became so rigid throughout the muscular system, that it was with some difficulty I could restore her. On being rendered calm, she said:—

"I see him—he is a great way off. He has a good many complaints, caused in the first place by sudden cold. I see him sitting alone in a small room; he holds his hands strange-

ly; now he is walking about. He once was intelligent, but now he *does not know—his reason is lost—he is deranged*. Oh, he is very pale. I do not like to look at him. I was affected just now as he is. He seems to be about thirty years of age, and has been deranged more than eight years.”

Two days after, I obtained a second description of the same case, from another subject, of course. This somnopathist knew nothing of the person to be described. On requesting her to examine and see if she could find the person to whom that hair belonged, she gave an involuntary shudder, and was considerably convulsed; and described the case as follows:—

“Oh, he is *crazy*, he is *crazy*! Oh, do take him away—do, do take him away from that place. They’ll kill him! Oh, it will never do for him to stay there. They have almost killed him, by giving him so much medicine. Oh, why did they make him take so much medicine! His stomach is in a dreadful state. He has been crazy for eight or nine years. They must sweat it out of him. It would do him good to sweat it out of him, especially if he could be pathetised. But they must not keep him confined in that place; he must exercise more.”

During this description the patient complained of sickness, and seemed to suffer sympathetically with the person she was describing.

These descriptions I sent to the sister of the person described, and soon after received from her the following reply:—

Providence, R. I., Feb. 2, 1843.

MR. SUNDERLAND.

Sir,—The description of my brother’s case, given by your clairvoyants, as to the cause of his complaint, the time it has been upon him, his condition, &c. is very *correct*.

At the time of your examination, he had been confined in the county jail for six months; and in justice to your description I would further state, that in the spring of 1835, when we first became fully convinced that he was decidedly deranged, he was conveyed to the Insane Hospital in ——. We were not permitted to receive any intelligence of him in three months, when we learned that he was so far reduced by their treatment, that they judged him unable even to ride home, a distance of forty miles. At the end of about six months, we

brought him away, merely skin and bones, and in a state of complete dementation. He did not know one of his family, and frequently crawled about on his hands and feet, like a beast. As his mind gradually returned, he would speak of his treatment at the Hospital, and said they pumped medicine into his stomach three or four times a week, and sometimes this was done at midnight. By some means, while there he was deprived of the use of his left arm and hand, and has not been able to straighten three of his fingers on the other hand from that time to this.

Respectfully,

WAITY A. MOWRY.

Mr. O. Wilmarth, of Providence, R. I., may be called on for a confirmation of the above account.

It has long been a question, upon which different pathetisers have found it difficult to agree, as to whether the patient obtains his knowledge from the mind of the operator, or independently of him. The true answer undoubtedly is, they obtain their perceptions in different ways. That the foregoing descriptions were not given from sympathy with my own mind, is certain; for I had no views of the cases. And yet, it will be found that somnipathists do often sympathise with the views and feelings of the operator to such a degree, that he merely gives his views and feelings upon the subject inquired about. Nor do some pathetisers seem to be aware, how very easy it is to give a somnipathist an *apprehension* of the *desired answer*, by the manner of pressing the question. Hence I could place little or no dependence on the reported descriptions of any patient, unless I knew all the circumstances of the case, and especially as to how the questions were put in order to get the information.*

* I have known of a number of cases like the following:—

A patient by some means had been thrown into severe convulsions, while in the somnipathic state. The operator, unable to relieve her, inquired of her (she was said to be *clairvoyant*) to know *how* she could be relieved; but she *could not tell*. I was sent for, and relieved her instantly, without, however, showing the operator *how* I did it. A few days after, the same patient was alarmingly convulsed again; but now, she directed the operator to relieve her in the very way I had done before. This was considered, by the operator, as a valuable *discovery*!

Another operator put a patient of mine to sleep, and on questioning her, she directed him as to the best process for putting one to sleep, and waking him up. It was the very process by which I had always

The following experiments are interesting, inasmuch as they were performed on a person perfectly blind, (the same one referred to in a preceding chapter,) and under the inspection of an intelligent committee, as before stated.

Each of the patient's answers, except when the action of the cerebral organs were suppressed or excited, were of the things *known* to the operator; and hence it is certain, that she got her knowledge, in these cases, by *sympathy* with his mind; as she could tell nothing, when asleep, which depended upon the sense of sight or hearing, which was not known to him.

To render the proceedings more satisfactory, the committee was appointed to determine on the order of proceeding, and to see that there could be no collusion between the operator and the patient.

On being put to sleep, a stranger went up and was put in communication with her. In answer to the questions put to her, she stated his name, (Eddy,) and the number of his residence, 17 Park Place.

A card was held over her head; she told what it was, and pronounced the name (Stewart) written upon it, correctly.

A piece of paper was placed over her head which had the following letters, prominently written upon it:—A. H. O. R. S. V. Z. She pronounced all the letters except one.

The following figures were next read: 1. 3. 4. 7. 8. 0. 6. A piece of paper with a red wafer was held over her head.

operated on that same patient; but the operator in this case, thought it a most important discovery.

Another still more *important* "discovery," was made in the following manner. With the patient in whom I first excited the mental organs, by touching various places in the face, I had had frequent conversations in the somniphic state, to find out what she would state in relation to Dr. H. H. Sherwood's hypothesis of the polarity of the human brain. Soon after exciting her mental organs from different points in the face and neck, another person put her to sleep, and asked her what those points in the face were. "Oh," said the patient, "they are the poles of the mental organs." And "upon this *hint*" that same person reported himself as having made the discovery of the "poles of the cerebral organs;" and I have seen his claims thus announced in a foreign Journal! But the manner in which that same man *interfered* with my subject, for the purpose of *intercepting* my experiments, may be left for detail to another occasion.

She was asked what colour the *thing* was; and answered, "red."

A phial was handed, by one of the Committee, to the operator. When he had tasted the liquid in it, the patient made up quite a wry face. She was questioned, and answered as follows:—

Q. "What is the matter, Mary?"

A. "It tastes sour."

Q. "What is it?"

A. "Vinegar."

The phial contained vinegar.

The operator irritated his hand with a knife. She threw her hand about, and manifested considerable uneasiness.

One of the Committee took her bonnet, and putting it on his own head, stepped behind her. On being asked, she told who it was that stood behind her, as, also, what he had on his head, and to whom it belonged.

An Almanac was held over her head,

Q. "What is this, Mary?"

A. "An Almanac."

Q. "What is its date?"

A. "1842."

This was correct. The almanac was just from the press, prepared for the next year.

Q. "What kind of Almanac is it?"

A. "Phrenological."

Q. "What is on the first page?"

A. "Picture of a man's head."

She was shown a part of a newspaper, and read a *part* of its name.

One of the Committee took a finger ring from Dr. L. and handed it to the operator.

Q. "What is this, Mary?"

A. "A ring."

Q. "To whom does it belong?"

A. "To—L."

Dr. L. said it was not his, but Prof. M. had said to the operator, that it belonged to Dr. L.

A cane was held over her head.

Q. "What is this, Mary?"

A. "A cane."

Q. "To whom does it belong?"

A. "To Mr. V."

Q. "What are the letters on the end of it?"

A. "J. V."

This was true. Another cane was presented to her.

Q. "To whom does this belong, Mary?"

A. "R—."

The letter "R." was all that could be heard in this answer. The cane belonged to Mr. Reed.

A number of watches were presented.

Q. "What is this, Mary?"

A. "A watch."

Q. "What time is it by this watch, Mary?"

A. "Twenty minutes past eight." The watch had stopped at that hour.

Q. "What time is it by *this* watch?"

A. "Half-past ten."

This answer was correct.

She was now seated at the Piano.

The tune, "Spring is not Spring to me," was selected by one of the audience. After repeating "They tell me Spring is coming," at a signal given by one of the spectators, she was suddenly stopped.

The Committee signified what they wished the operator to cause the patient to do by signs; no noise was made, and as she was blind, of course she could not know what she was desired to do, except by sympathy.

At a given sign to the operator the patient commenced playing "The Old Arm Chair." Another sign, and she stopped in the midst of a bar, as before. A sign was made again, and she commenced exactly where she left off in the first tune. Another of the spectators then selected, "Woodman, Spare that Tree." A sign was given, and she stopped. Another sign, and she commenced exactly where she left off, "The Old Arm Chair."

The operator reversed the passes over those portions of the brain appropriated to *tune*.

"Mary, I want you to play this tune for me."

Mary. "I can't play it."

"I want you to play this, Mary; you know it is a great favorite of mine."

M. "I would play it if I could; but I can't think of the air."

"Can you repeat the words to me?"

M. "O yes."

"Well, repeat them."

M. "My sister dear," &c. (repeating the verse.)

And while she was repeating the verse, the operator excited the organs of tune; and while doing this she commenced playing, and sung, "My Sister Dear," &c. And while she was singing this, he reversed the passes over her head for the purpose of waking it up. She ceased playing, and as if awake, in her natural state, answered whatever questions were put to her, by one of the spectators. While she was conversing with her, the operator, (unknown to her) pathetised her head, and she immediately began where she left off in the last tune.

I am aware that patients, in a state of somniphany, may often be made to hear at a great distance; but it is not clear, as to whether they hear by the ordinary sense of hearing, or by the same sense by which they see in this state. I am inclined to the latter opinion.

These are a few of the many experiments of the kind which demonstrate the reality of a peculiar sympathy between the patient and operator, and which shew beyond all reasonable doubt the existence of that *perceptive* power, which, in certain states of the physical system, may be exercised so as to give accurate descriptions of things without the use of the external senses.

The following details are furnished me by Dr. W. B. Fahnestock, of Lancaster, Penn., and may be depended upon as a faithful report of facts, which resulted from his own experiments:—

Subject, Mrs. H—, of most exemplary character, who had been laboring under a nervous affection of the eyes and lower extremities for nearly two years, but who has been entirely restored by pathetism alone. She was requested to tell what a certain gentleman had in his yard, at the distance of several miles. When asked whether she would gratify the gentleman by looking, she said she did not care; and after she had looked, she asked me what kind of an animal it was. I told her I did not know what was there, as the gentleman had been very careful not to tell me. "Well," says she, "it is a raccoon; he is fastened, and is now lying in a box near the oven, asleep." The gentleman frankly stated, that she was correct. He had placed it there, and came over in the evening to test her powers. Some time previous to this, she was requested by a sceptic to visit a gentleman's apiary at a distance, and to tell the number of hives, and the condition of the bees, which he represented to be in a very flourishing condition. After looking, she remarked that he had about twenty hives, but that the bees were all dead. This seemed strange to me, and I asked her whether she was sure that they were all dead. She said, "Yes, you will see they are all dead." The gentleman then stated that such was the truth, and that the fact had not been known to any but himself. On another occasion, she was requested by a neighbour to visit his house, and to state where his wife was, and what she was doing. After stating several things respecting her to his satisfaction, she asked me when the tree before Mr. B.'s door had blown down. I asked Mr. B. whether that was the fact, and instead of answering my question, he requested me to ask her whether it was all blown down. She said, "No, about the half of it." Such was the fact. Half of the tree, a very large willow, which stood before the door, had blown down the evening before, and next morning early the fact was stated to the owner, unasked, and independent of any communication between the two houses. His intended visit was unexpected to us, and the distance between the two houses is about four miles.

Patients are always in sympathy with the operator, yet, as they frequently relapse into that peculiar state of forgetfulness which they call sleep, it is necessary, when the operator is desirous of performing an experiment, first to draw their attention, and to obtain their full consent, before he can succeed. They have the power of placing themselves in communication with any one they please, even at a distance, and can read or know their mind, if they be so disposed. They can do this at any "angle," without the aid of "that bowl of molasses," or any other agent.

This peculiar power enables them to know the mind of any one in the room, and is the reason why all unfair and ungentlemanly skeptics are unable to receive such proofs of their abilities as would be satisfactory. I have no doubt, some will smile at this assertion; and yet, I can assure those who are interested, that in good subjects this power is very evident, and that it will be impossible for any one to receive satisfaction, unless they prosecute their experiments with the right spirit.

It now gives me pleasure to state, that I am able to give you the result of some of my experiments, which were prosecuted to test the powers of the other senses, under like circumstances, in the same state, and more particularly the sense of hearing, which, together with the other senses, strange and unnatural as it may seem, they are enabled to translate and use at a distance.

When the sense of hearing is pathetised, the subject does not hear unless there is an express desire on his or her part to do so; and when that desire ceases, the sense relapses into its former forgetfulness, and is then deaf to every sound but the voice of the operator. They are always obliged to hear him, and if they are willing to listen he can direct them to do so, and they will hear others speak, &c. without any other communication. This they can do, independent of his will; and when they desire to listen, they can hear the slightest whisper even at a distance, and I have as yet not been able to set any bounds to it, if, indeed, there be any.

My experiments have been conducted with the utmost care; and I am confident, that if similar experiments be repeated by others, with proper care, the results will be as satisfactory to them, as mine have been to me.

Experiment 1st. Subject, a young lady. Three persons were requested to retire into a distant part of the yard, and to speak of something which they should bear in mind. When asked what they were speaking about, she said, "they are talking about the kitchen and the piazza;" and when requested to state the exact words they were speaking at that moment, she replied, that "Mr. Z. just now said that it will do very well," alluding to the manner of the trimming of the trees, &c. They were then requested to come in; and when told what she said, they declared that those were the subjects spoken about, and the exact words that had been uttered.

Experiment 2d. Subject, a lady in the country. Was requested to state, what they were speaking about in the house of a neighbor about one hundred yards distant, and the doors being both closed. She said they were speaking about a Mr. M——, who lived at a distance. Answer ascertained to be

correct. This experiment was performed on the spur of the moment, without any previous arrangement, and therefore puts the possibility of collusion out of the question.

Experiment 3d. Subject, a young lady. Was requested to state what two young ladies were speaking about in the next room, who had retired for that purpose. They were directed to whisper barely loud enough for the one to hear the other. Her answer was correct.

Experiment 4th. Subject, a lady. Was requested to listen to some music at a distance. Said she heard it, named the tunes that were played in succession, and the kind of instrument upon which they were performed, &c. This was also performed without any previous arrangement. Her statements were ascertained to be correct.

Experiment 5th. Subject, a lady. Was requested to listen to what a young lady was singing, who had been sent out into the woods for that purpose by certain skeptics, with directions to sing merely loud enough to hear herself, and to note which piece she sang first, &c. Answer: "She is singing, 'My soul is heaven bound, glory, hallelujah!'" and after a pause of perhaps half a minute she said, "and now she has commenced the Promised Land." Answer correct. She sang but two pieces, and those so low, that (to use the young lady's own expression,) it was impossible for any person to have heard at the distance of three yards.

I have two subjects, both gentlemen, in whom the sense of seeing is not pathetised, at the same time that the sense of hearing is, and who are both able in that state to translate themselves, or rather their senses, to a distance; and although they can see nothing, they are enabled to hear every thing that is said, &c. They have frequently told what was spoken at the distance of several miles; and when taken to a cocoonery at the distance of four miles, they declared they could hear the worms feeding as distinctly as if their ears had been within an inch of them.

Both of these gentlemen were at one time skeptics, and entered this state out of curiosity. One of them has lately entered into this state more perfectly, and upon the tenth trial was enabled to see, and has now become a most excellent clairvoyant.

With these and several other subjects, I have performed many like experiments at even a much greater distance; and so far as I have been able to ascertain, they have always been correct. If, then, they can hear and repeat the exact words spoken, or the music played, &c. at a distance so far exceeding the powers of the same sense in a natural state, how can

we limit their abilities? I have also made many experiments to test the powers of the senses of touch, taste, feeling, smell, &c. at a distance, with the most decided success; and I am now perfectly convinced, that they can translate all their faculties to a distance, and use them, as correctly and with as much judgment as in their natural state.

CHAPTER XIV.

CONCLUSION.

If the reader has made a candid and impartial examination of the facts and arguments detailed in the preceding pages, I cannot doubt as to the conclusions to which he must already have arrived. And if he has accompanied his observations with experiments, for the purpose of testing the soundness of the theory I have advocated in this work, I am quite confident that, though he should not agree with me in some minor points, yet we shall not differ in the more important principles. As, for instance:—

1. With regard to the *reality* of that agency which I have denominated *pathetism*. No fact in physiology is more clearly demonstrated, than the existence of that susceptibility of the human system, on which impressions are made by mere mental or physical sympathy. To doubt this, with the evidences before him, which are always available to the candid inquirer after truth, one must, indeed, doubt his own senses; and he might as well distrust his own competency to arrive at the truth upon any subject.

2. As to the nature of this agency. I have fully shown, I think, that it is not, and cannot be, any kind of *fluid* eliminated from the operator into the subject, either magnetic, electrical, galvanic, or nervous. And since I became quite familiar with this agency, it has appeared to me a matter of no small astonishment, that the many intelligent and scientific minds who have hitherto investigated this subject, should not have seen the reasons which demonstrate, as I think they do, so clearly, the fallacy of the old theory of a universal fluid. Indeed, the difficulties in the way of this notion are insuperable: they can never be reconciled to what we know to be matter of fact.

Nor is there any necessity for such a medium. If it be asked, how the cerebral system of one person can be impressed by the cerebral influence of another, without a connecting fluid, I might answer:—

How does the brain become impressed, or how does the mind have perceptions of distant objects, such as the planets, or distant friends? Is the mind so constituted, that it cannot have perceptions and views of distant things without a connecting medium, *through which* those views are conveyed from the objects to the brain? If so, how does it come to pass, that every mind has views of things which never did actually exist? How easy for the mind to form to itself pictures of ideal existences, which cannot, in the nature of things, ever become real. But these impressions are not caused by any fluid, as a connecting medium between these objects and the brain, for this is impossible. These impressions are spontaneous, and caused by the mind's own inherent action, or by external agencies by which its functions become excited to action.

An operator sits down before his patient, and *wills* him, as it is said, to go to sleep. The sleep follows this effort, and he concludes, of course, that his will has *caused* the elimination of a fluid which has penetrated the nervous system of the patient, and produced the desired result. But suppose the same results follow, when he wills that the subject should *not* fall into a state of sleep? What then? What becomes of the *will* and the fluid in this case? And I have had scores of patients, who would go to sleep just as soon against my will, as with it. That is: if you give the subject an *apprehension* that sleep is the anticipated result, if he be susceptible it will follow the process adopted for its production, whether you will it or not. And with thousands of such facts as these before us, how can we subscribe to the hitherto prevalent notions upon this subject? I have no doubt that many operators have been deceived, (as I know some of them have been most egregiously,) both in respect to the reality of the results, as well as the agency by which they were supposed to have been induced. It is quite an easy thing for some per-

sons to feign this sleep, as well as the mental excitements in phrenopathy; and I have known instances where subjects, under the management of those considered experienced operators, who feigned, to admirable perfection, all the phenomena peculiar to a state of somniphathy. And some such subjects have even been exhibited before public audiences as the finest specimens of this singular state!

Admitting all that has been assumed in those cases, in which we are told by operators that they have put their subjects to sleep without their knowledge, when miles distant from them, it by no means proves the existence of the assumed fluid. We have seen that two minds, at a great distance apart, do sometimes yield to the same influences or sympathetic laws, as in the case of Mr. Wilkin's dream. Nor is it unreasonable to suppose that this influence depends upon a peculiar *relation* previously established between two minds.

If I were asked what the medium of this sympathy is, I might answer, that there is no more necessity for a *medium* for the transmission of this sympathy, than there is for the transmission of thought from one place to another. Sympathy, itself, is a medium, if we may so speak, which always exists wherever there is a relation established between the right persons or things.

Nor is it possible to show, how thoughts may be *communicated* from one mind to another, at a distance, without the use of the external senses, by such a pervading medium as is supposed to surround the earth, and even to fill universal space. With this medium, all the imponderable fluids, such as light, heat, and electricity, have more or less connection. Nor do we see how thought could be *transmitted* through this medium to a great distance, and be *received* into the nervous system of another, where there were so many all-pervading, disturbing causes. And especially, if this be a *vibratory* medium, does nothing but thought cause the vibrations? If so, it is impossible to see how mere thought should be *received* from another at a distance, inasmuch as all thought must have more or less effect in producing the vibrations, and, consequently, the medium itself must be kept in unending confusion

by the ever varying vibrations which are caused by every thinking being in every part of universal space. Imagine, if possible, the condition of this medium in a room full of people. What currents and counter-currents, vibrations and cross vibrations, must be kept in perpetual motion, in such a place. And how is the straggling thought to be vibrated through so many inconceivably subtle and ever changing vibrations in the surrounding medium, already filled and crowded with other thoughts and influences, which cause innumerable vibrations in other and contrary directions?

Or, suppose we allow that it may be in the nature of this medium to admit and transmit mere *thought*, without any limits to their nature or numbers. Then it will follow, that we should be able to transmit our mere volitions whenever and wherever we pleased. It should be just as easy for me, while in the city of New-York, to put any person to sleep in London, as to do it in this city, where I can reach the subject by my voice? Why not? We should be able to put any one to sleep, not only as distant as the extent of this medium, but any one who is susceptible, though the patient had never seen or heard of the operator. This, however, *cannot be done*, as every operator knows. You cannot put a stranger to sleep, however susceptible he may be, whom you never saw, and who never has had any apprehension of your influence. And while this fact is enough to annihilate the fluid or "vibratory medium" theory, it presents no difficulty in the way of Pathetism; for, according to this theory, a patient may be put to sleep as well a million of miles distant, as one, provided he be in a suitable condition at the time, and have the necessary *apprehension* of the anticipated or *designed* result. Where the *relation* has been sufficiently established between two persons, the subject may be put to sleep at any distance from the operator, provided the former have an apprehension of the influence to be exerted upon him.

The vibratory, or fluid medium theory, has been argued from the perceptions which some subjects have been found to have of articles breathed upon or touched by the operator; but I have, I think, in the preceding pages, satisfactorily ac-

counted for this perception, by demonstrating the existence of a peculiar *sense*, which is developed in cases of catalepsy and natural or induced somnambulism. What is it that enables the dog to trace the footsteps of his master, or the course of the fox, for miles together? The feet of the former may be covered, so that no imaginable effluvia could be left from the hasty steps upon the surface of the ground passed over; and yet, to the dog is given a sense by which the steps and the direction taken by his master is traced for miles and days together, with unerring accuracy. Is this done by a vibrating medium? I grant, that the contact of any article with the operator, or the effects of his breath upon it, may so change its quality as to render it perceptible by the above *sense*; but this does not involve any necessity for a fluid, nor for any vibrating medium, as has been supposed. It rather relieves the subject from any such necessity; as this change in the quality of substances is brought about by that first law of pathetism already described, which requires that a relation should be established between two different things, in order to produce any change in the quality of either.

But this "vibratory medium" affords no solution for the peculiar sympathy which is found to exist, in most cases, between the operator and his patient. Why should not any patient be as much affected through this universal medium, by the will of one person as of another, provided the operators have an equal force of will?

In all the reported experiments with magnets, electricity, the galvanic battery, the eye, and the will, we can deduce little or nothing in favor of this fluid theory, because we cannot know how much the *mental apprehensions* of the patients were impressed. These are of no avail in proving any hypothesis, until you have succeeded by these processes on a new patient, one who had no mental apprehension or anticipation of the process, or its anticipated results. So of operating by minerals and metallic substances, or through any other medium. Much depends upon the apprehensions of the patient, and much, also, upon the apprehensions of the operator. Hence, some always complain of fatigue after operating, and great

exhaustion: the reason is, they conceive great mental effort necessary to induce any results. I never feel exhausted, though I have put fifteen or twenty persons to sleep in a day, and could just as well put fifty or five hundred to sleep in the same time, without feeling any exhaustion at all.* If the operator fancies himself weak, or that the state of the atmosphere is unfavorable, and especially if he gives his subject any idea of these supposed disturbing causes, of course he will not succeed so well. It is not denied, but that an operator may exhaust his own mental and physical energies, by efforts of this kind; but there is no more necessity for this, than there is of becoming exhausted by giving the attention to any other subject or effort. I have often been conscious of relief, after writing all day, by operating in the evening for an hour or so; and I can easily see how this comes to pass. The mind always suffers when one or more of the organs are kept long directed to one object; and relief ensues, when the action of these organs is suspended, by the excitement of other portions of the brain.

Having in the preceding pages spoken so freely on the nature of this agency, and assigned what I considered to be some conclusive reasons, to show that it is not a *nervous fluid*, or current, transmitted from the operator into the system of the subject, it is not necessary for me to enter more at large upon the examination of this question. The more I see and hear on the subject, the more I am confirmed in the conclusions already expressed upon it. One additional fact, omitted in the proper place, may be stated here. It is this: *I find it equally easy to cause patients to excite their own mental organs.* I have only to cause the subject to place his finger upon his own head, and just as certain as he *apprehends* what the result should be, he will manifest the appropriate function! Is there a "*neuraura*" eliminated in these cases?"†

Finally, as to the intrinsic importance of this subject. It must be understood, of course, to be fully appreciated. It is

* I have put a number into a state of somniphathy in my office, while sitting at my desk composing the pages of this work.

† See Appendix.

in this field of inquiry, that we are to become familiar with the laws of *mind*. From this source is to emanate that light, which is indispensable to the right understanding of the mental functions, and the nature of those agencies which control or modify them.

Hence its application to the purposes of education and the management of children. Is it not plain, that the mental dispositions and susceptibilities of children should be perfectly understood, before they can be managed and controlled to the best possible advantage? And what greater injury could be inflicted on a child, than that impression made upon his susceptibility by the undue excitement, perhaps, of an organ, when at the same time its opposite function should be aroused and brought into action? The whole difficulty lies here: if the parent or teacher be ignorant of the avenues to those mental functions on which Good Nature, Kindness, Zeal, Benevolence, and Ambition depend, he will be as likely to excite Anger, Aversion, Deception, and those other passions which render children so exceedingly difficult to manage, as the former. And is it no injury to the child, when you excite his anger instead of his love, and his revenge instead of kindness? In this way the disposition may become radically changed in a very short time, and impressions made upon the mind that will last as long as the power of thought endures.

This subject gives a most clear and satisfactory account of the different relations of life, and the manner in which they should be fulfilled. Suppose we take a perfectly balanced head, for an example. Here is a congeries of various mental functions, for every relation which it is possible for man to sustain,—one giving a sense of obligation to the Deity, and others for the various duties of life, disposing him to the avoidance of all evil, and the pursuit of the best ends, by the most appropriate means.

These organs are balanced by opposing functions, so that the best minds are susceptible to temptations to swerve from duty. If this were not the case, it is not easy to see how one could be tempted at all, or what would constitute the virtue of obedience.

For instance, if a man commits an act of injustice, it surely is not the organ of Conscientiousness which perpetrates that wrong, but its opposite, which can be excited to action only when the former is suppressed. And hence we see what constitutes the perfection of any one character. It is the indulgence or exercise of all the organs, *in harmony with each other*. Acquisitiveness is not so excited as to control Conscientiousness; Revenge is not suffered to control the Will, nor to become excited above the activity of Compassion. The man has Benevolence, but this organ is not to be excited to the injury of others, and hence, with all the other organs it is balanced with an opposing function, which regulates its activity, when necessary, in *perfect harmony* with the rest. All the laws of God agree; hence, when the mind is properly balanced, and all the mental and physical functions harmoniously exercised, His laws are obeyed in the use of the one, two, three, or five "talents," according to the cerebral endowments of the individual. Whatever is done, will be in accordance with the Divine Law, and the best interests of all.

We see, also, what should be done when the cerebral functions are deficient in any respect. The person should be made acquainted with these laws; and, knowing his own mental constitution, he may guard against those agencies which are calculated to excite his susceptibilities to wrong doing. If he knows he has large Anger, large Resistance, large Destructiveness, and little Suavity, and small Benevolence, he may and should govern himself in view of these facts. He is just as *really* responsible (though not to the same degree,) as if his functions were perfectly balanced, and in the Scripture language he were possessed of the "five talents."

The principles here advocated make parents responsible for the mental characters of their children. We have seen how wonderfully the susceptibility is developed in females during the time of gestation, and to what an extent the fœtus shares in this quality of the living body,—so much so, that it is in the power of the mother, by a knowledge of these laws, and the government of herself according to them, to transmit to her offspring mental qualities far superior to her own. If,

during that interesting and important period, her mind be occupied by the contemplation of the good, the kind, and benevolent,—if all the baser functions and passions be suppressed, and no unhallowed emotions be permitted to find a lodgment in her disposition, the laws of God must be reversed, or the good effects will appear in the cerebral developments of the children born of such mothers. No intelligent physiologist can conscientiously doubt this doctrine. It is recognised in the Inspired Scriptures, as I have before shown; and it might be seen demonstrated in the case of every child, if we could know the history of its mother's mental exercises during the time above named.

I cannot doubt but that the characters of many children are affected very much, by the want of what I may denominate a real *conjugal union* between the parents; and were the subjects treated of in this work sufficiently understood, I firmly believe, far less of those marriages would take place, where conjugal union between the parties was wanting. It is now generally admitted, that a large proportion of the marriages which take place, prove unhappy. The parties are united for life, before they find out that they are not the persons they thought they were: in other words, that they have little or no conjugal love for each other. Hence, each is displeased, more or less, with the habits, the mental endowments, the tastes and views of the other, which constitutes a source of unending difference, and perhaps strife and discontent. Now all this knowledge the parties should have of each other before the union is formed; and it might and would be obtained, were the necessary means used for this purpose. There are some persons so constituted, that their minds can never be made perfectly to harmonise. They may be too much alike in some respects, that is, if each have large Aversion, Self-Esteem, Will, Self-Confidence, and Firmness, the conjugal love must be very strong indeed, to secure them against frequent collisions. But when persons find themselves married with this unhappy balance of views and tastes, they need not be miserable, necessarily, on this account. By an acquaintance with the nature and laws of mind, and a fixed resolution

to fulfil all the duties of every relation, the action of these predominant organs may be more or less modified, and the mind rendered comparatively happy, in its efforts to make the best of its susceptibilities. It is a matter of reason, for every unpervverted mind to desire the greatest amount of good ; and when once convinced that the greatest good of the whole is the greatest possible good to each individual, the mind should not hesitate in coming to the decision, to make use of all the available helps to secure this end.

Such are some of the practical purposes to which these principles are to be applied. They are concerned in all the passions, emotions, feelings, perceptions, and volitions of human existence. They show how one mind affects another, for good or for evil ; and not, merely, how the body may be relieved from pain, but how the mind may be governed and developed, so as to secure the greatest amount of holiness and happiness which it is possible for each one to enjoy.

THE END.

A P P E N D I X .

Since the sheets of this work were in press, I have seen what purports to be a "Diagram of the Phrenological *portion* of Neurology, by Dr. James R. Buchanan." It is a little larger than life, and is sold for one dollar each. It has his assumed new organs marked upon the head, face, and neck, besides a number of letters and hieroglyphics, which are not explained, but which, to the uninitiated, will of course give quite an impressive sense of the mysteriousness of the science.

All the locations of the organs on this chart, differ in almost every respect from the busts marked by Dr. Gall and his successors; and as Dr. B. has drawn up this chart from the results of experiments made by the agency treated of in the preceding pages, it may not be out of place for me to offer a few remarks here concerning his assumptions, though I am by no means disposed to spend much time upon it, or to notice any considerable proportion of the many and INSURMOUNTABLE difficulties which lie in the way of Dr. B.'s theory.

The Doctor, himself, made a remark about his system, in one of his public lectures in this city, last winter, which at the time surprised many who heard it; but it will afford no little assistance in accounting for the arrangement of the different organs in this diagram. The remark was this: that he *invented* his theory *first*, and then commenced his experiments in its confirmation! That is, he first decided how the phrenological organs *should* be located, and afterwards commenced his experiments to prove his theory correct! To those who know any thing of the sympathies of the human system, or its *susceptibilities*, I certainly need not undertake, here, to say, how much dependence they should place on the assump-

tions of one who goes to work in this manner to find out the functions and localities of the cerebral organs.

Indeed, I cannot withhold an expression of my astonishment, that a man of Dr. Buchanan's apparent intelligence should have been so completely bewildered in the labyrinth of his own fancy, as he has evidently been, in building up his theory of "Neurology." This was to have been expected, to be sure, from the manner in which he boasts of having begun his investigations; but the marvel is, as to how he could be as familiar as he assumes to have been, with the functions of the nervous system, for some two years or more, and yet never have been able to discover, during all this time, the *real* nature of that agency by which his experiments upon the cerebral system were performed. He tells us, that he has experimented upon some sixty different subjects, who were highly susceptible to what he calls his *neuraura*, and from these experiments he has drawn up this chart. And as I do not at all agree with the Doctor in his conclusions, either as to his locations of the different organs, or the nature of that agency by which he operates, it is due to truth that I should state, candidly, the reasons for dissent. Of course, I cannot go fully into this subject here, nor is it necessary, as I have already done this in the preceding pages of this work.

The following is one of Dr. Buchanan's fundamental principles—it is the foundation of what he calls "Neurology":—

That a nervous fluid is eliminated from the operator into the subject, and this fluid, when the finger of the former is applied to the cranium of the latter, excites the mental organ located in the place touched by the operator.

Thus, if the operator place his finger on what Dr. B. calls the organ of "*Ignorance*," the subject becomes ignorant; if on the organ of "*Stupidity*," he becomes stupid; if on the organ of "*Awkwardness*," he becomes awkward; if upon the organ of "*Disease*," he becomes sick; if upon the organ of "*Idiotcy*," he becomes idiotic; if upon the organ of "*Intoxication*," he becomes drunk, not with alcohol, to be sure, but with the *neuraura* eliminated into him from the hands of the operator.

Now it will be admitted, on all hands, as I have already stated, that the *immediate* agency which excites the organs in any case, must be the same, by whatever cause that agency is brought to bear upon the mental functions. For instance, you titillate the sole of the foot, or under the arms, and you excite the organs of *mirth*. But, is there a fluid *eliminated*, in this case, from the hand of the operator? Is there a fluid in this case eliminated from the finger of the operator, into the foot of the subject, and from thence up into the organs of mirth? What conveys that fluid to those organs instead of any other part of the system?

You tread upon the patient's toe, and it excites his organ of Combativeness. But is there a fluid communicated from the foot of the operator, into the toe of the subject, and thence up the limb into his organ of Combativeness?

Again, in the base of the brain Dr. B. locates an organ of Calorification, and the fluid reaches the organ, he tells us, when the hand of the operator is applied to the chin of the patient. But what hinders the fluid, in this case, from being conveyed to other portions of the brain? The truth is, however, that every susceptible person, the world over, if he is left in total ignorance on the subject, will be just as likely to have any other sensation, on taking hold of the chin, as that of heat; and if you tell the patient before hand, that the *design* is to give a sensation of cold, in a majority of cases, that sensation will be produced. If the subject have no idea of the design, or anticipated results, he will be as likely to have one sensation as another. This I know and have demonstrated, not by experiments upon "sixty or seventy impressible subjects, but upon hundreds. Indeed, I have demonstrated this fact, by experiments upon some of the very subjects to whom Dr. B. refers; and I am well persuaded, that he could not find a subject, but from whom I could bring out results, directly opposed to his own assumptions. And to show how egregiously the Dr. may have been deceived in his conclusions, it may be proper here to state a few facts.

1. It is well known, that while in this city and in Boston, Dr. B. experimented mostly, not upon new subjects, but upon

those who had been frequently pathetised, and experimented upon before, with very *different* results. Two lengthy reports were drawn up, and published in the Evening Post of this city, of his experiments here—the most of which were performed on two well-known subjects—from both of whom altogether different results were brought out, by different operators, long before Dr. B. arrived in this city. And that he was deceived in one of them, is a *matter well known here*. Of this fact the gentleman was informed, after he drew up the account for the Boston Medical and Surgical Journal, and which was published, also, in the Evening Post, in January last.

2. Dr. B. was understood to affirm, that Mr. I. whom he brought here from Cincinnati, was one of the best, and the very best subject he ever had. And if I am correctly informed, Mr. I. was Dr. B.'s *oracle*. He was often heard to say, that Mr. I.'s "impressibility" was so great, that he could give a perfect diagnosis, by merely touching the subject to be examined; and he carried this to a delineation of the mental powers, the passions, emotions, and thoughts of the mind, even to telling husbands whether their affections for their wives had changed within one or two years.

The following is a specimen. It is from the pen of Dr. B. himself, and may be found in the first number of the Journal of the Cincinnati Phreno-Magnetic Society. He is giving an account of the manner in which Mr. I. and Mr. C. (his "students,") examine heads, and adds,—

"We hear them say—You are not so much attached to your wife as you were once; your conjugal feelings have been much excited; you have been to see your wife lately, and are very much attached to her," &c.

Now, we put it to the reader to draw his own inference, when we inform him, that the character of one of the subjects on whom Dr. B. operated for some weeks, in this city, (and once before a committee appointed by a public meeting) and who was frequently examined by Mr. I., and whose condition was quite *peculiar* all the while, was never found out

by him, nor do we suppose it was even suspected—for certain we are, if it had been, no *report* of any experiments performed on such a subject would ever have been made public. And, what is worthy of notice, Mr. I. and this subject were often understood to affirm that the sympathy between them was so great, that if one were sick at a distance, it rendered the other sick also! And yet, the *neuraura* did not enable Dr. B. or his oracle to discover, that they were both humbugged and deceived by that subject, as it is well known they most assuredly were. To show still further, that Dr. B. was really deceived in his assumptions about Mr. I.'s power, I will state one other fact.

Dr. B. long before he reached this city, from some causes, which it may not be necessary to explain here, conceived a very *strong prejudice* against a gentleman, whom we will here call Mr. S.* As might be expected he imbued Mr. I. his highly impressible subject, with the same feeling, and Mr. I. from the circumstances of his situation, of course, would be very apt to manifest his sympathy with his teacher.

Hence when in Albany, Mr. I. happened to see a bust, which he was *told* came from Mr. S., and (will the reader believe it,) it actually threw him into convulsions; [Dr. B. was heard to say repeatedly, that Mr. S.'s "*neuraura*" was decidedly *pernicious*, [!] and how could poor Mr. I. who was so "highly impressible," help falling into fits whenever he came near any *thing*, or *person* touched by Mr. S. ?]

The reader has seen another case, stated in the note on page 111, where Dr. B. and his oracle were most egregiously deceived in the same way, while in this city. The facts there stated, I had from persons present when they occurred; and they put the matter beyond all doubt as to whether Dr. B. was not deceived in his assumptions, both as to the "impressibility" of his subjects, and also as to the real nature of that agency by which they were affected. And yet, it is from the results brought out from such a subject, that Dr. B. has founded his science of "Neurology," and scattered to the four winds

* For proof, see Journal of the Phreno-Magnetic Society, No. 1, page 13.

the protracted labors of Gall and Spurzheim.* There are not more than five or six of Gall's locations, which are allowed as correct in this chart. Where Gall places Destructiveness, Buchanan puts *Conservativeness*; where Gall locates Love of Children, Buchanan places *Tyranny*; and where Union for Life should be, Buchanan places *Cruelty*.

I do not see how it can be possible, that Dr. B. has experimented on seventy good subjects, as he says, and yet has remained, till now, ignorant of the fact, that no two of them could be affected precisely alike *in all respects*. I venture to say, there is not an operator to be found, of any experience, who will not agree in this statement. True, the results may agree in part; as for instance, you can excite the same functions in two or more subjects, but you cannot always do it from precisely the same locations. But, if these excitements are produced by a fluid they should agree, and not only so, but we should be able to excite all the different organs in every subject in which we can excite *one* by this agency. But this is not the case, as I know. These excitements depend, *in a great degree*, on the mental *apprehensions* of the subject; and hence the answers, in most of the cases experimented on in this city by Dr. B. were suggested by the manner in which the questions were put, so that the subject apprehended the anticipated results. Indeed what could be more evident, than this fact, knowing as I do, that *patients may be taught to excite their own organs, by touching them, just as well as another could do it for them*; and this fact, alone, is enough to annihilate, forever, the laboured theory of "Neurology."

For these and other reasons I have but very little confidence in Dr. Buchanan's chart. I am satisfied beyond all doubt, that his notions about the elimination of a fluid from the operator into the subject are totally unfounded. The phenome-

* The following is a specimen of the estimate which one of the medical profession of this city, (but we believe he was the only one who received Dr. B.'s theory,) put upon these monstrous assumptions. Dr. S. Forry, speaking of Dr. Buchanan's discoveries, says: "Before this discovery, on the assumptions of its truth, those of Gall, Spurzheim, Majendie, and Sir Charles Bell, dwindle into comparative insignificance." Surely the age of *Tractors* is not past!

na induced by his experiments, and those also under the name of Mesmerism, are produced by the laws of sympathy or nervous induction. I have a thousand times produced these phenomena, without contact with the subject, and without *willing* them as it has been called, and consequently without any *fluid*, magnetic or nervous.

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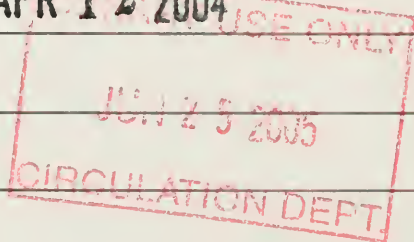
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